

Data Validation Package

May 2006
Gunnison, Colorado,
Processing and Disposal Sites

September 2006



U.S. Department of Energy
Office of Legacy Management

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Sampling Event Summary

Site: Gunnison, Colorado, Processing Site and Disposal Site

Sampling Period: May 15-19, 2006

This event included annual sampling of wells and surface water locations at the Gunnison, Colorado, Processing Site, and a five-year sampling event of wells at the Gunnison, Colorado, Disposal Site. Sampling and analysis was conducted as specified in *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites*.

Samples were collected from 29 monitor wells, 9 domestic wells, and 5 surface locations at the processing site as specified in the *Ground Water Compliance Action Plan for the Gunnison, Colorado, Processing Site*. Samples were collected from 8 monitor wells at the disposal site as specified in the *Long-Term Surveillance Plan for the Gunnison, Colorado, Disposal Site*. Duplicate samples were collected from locations 0161, 0186, and 0716. Three equipment blanks were collected during this sampling event.

Water levels were measured at selected domestic wells and all monitor wells that were sampled with the following exception: the water level was not measured in well 0716 at the disposal site because the level was deeper than 150 feet (ft), which was beyond the range of the available equipment.

Monitor wells with sample concentrations that exceeded the U.S. Environmental Protection Agency (EPA) maximum concentration limit (MCL) for uranium (40 CFR 192) or the EPA drinking water equivalent level (DWEL) for manganese are listed in Table 1.

Time versus concentration graphs for selected processing site monitor wells are included with the analytical data. Time versus concentration graphs for manganese indicate that concentrations of manganese in ground water beneath and down gradient of the site are above the DWEL, but concentrations are generally decreasing with time. Time versus concentration graphs for uranium indicate that concentrations of uranium in ground water beneath and downgradient of the site are above the MCL, with concentrations decreasing in some portions of the aquifer (0012, 0113, 0125, 0126, 0127, and 0186) and increasing in others (0112, 0160, and 0161). Increasing concentrations of uranium in deeper portions of the alluvial aquifer and downgradient of the site are expected as the plume migrates deeper and further downgradient.

Uranium concentrations in the nine domestic wells sampled near the processing site were all below the EPA drinking water standard (0.030 mg/L), and manganese concentrations in these wells were all below the DWEL.

Table 1. Gunnison Locations That Exceed the Uranium MCL and Manganese DWEL

Analyte	MCL ^a	DWEL ^b	Location	Concentration ^c
Uranium	0.044		0005	0.044
			0006	1.2
			0012	0.39
			0112	0.05
			0113	0.08
			0183	0.067
Manganese		1.6	0105	2.3
			0106	9.6
			0112	7.5
			0135	3.3
			0187	2.2

^a Uranium standard is listed in 40 CFR 192.02 Table 1 to Subpart A; units are in mg/L.

^b DWEL from EPA's 2004 Edition of the Drinking Water Standards and Health Advisories.

^c Units are in mg/L.

Surface water uranium concentrations are compared to data from location 0792, which is located on the Gunnison River upstream from the site. The benchmark value of 0.0015 milligrams per liter (mg/L) is in the upper 95 percent tolerance limit of uranium data from that location. The uranium concentration at the Gunnison River downstream location 0795 was less than the benchmark value indicating minimal impact to the Gunnison River from site activities. Uranium concentration at the Valco gravel pit pond (0780) is elevated compared to the benchmark, which is expected because the gravel pit is recharged by contaminated ground water from the site. Uranium concentrations at Tomichi Creek locations (0248 and 0777) are elevated compared to the benchmark, which is expected because Tomichi Creek receives discharge from the Valco pond.

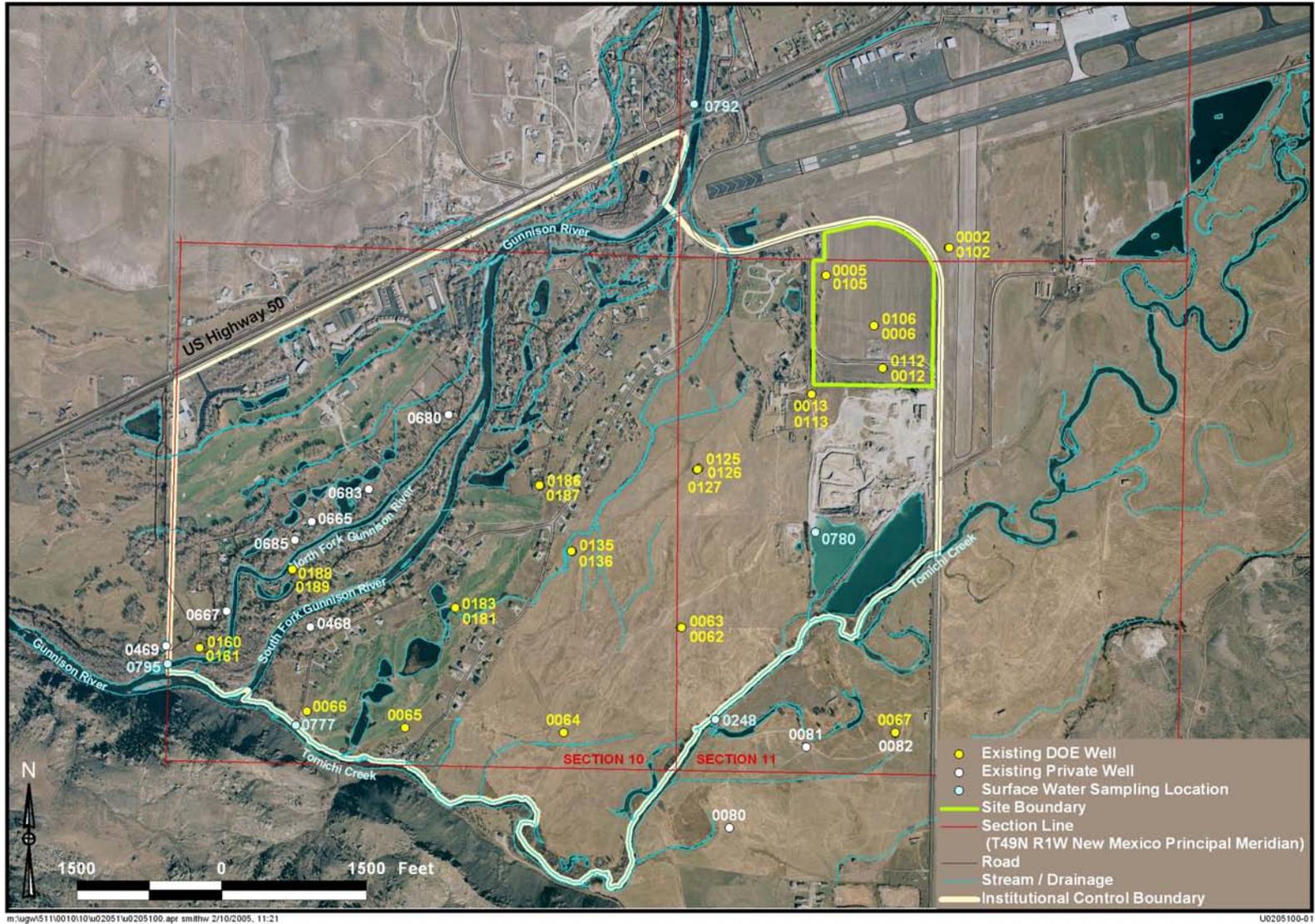
Uranium concentrations in the disposal site point of compliance (POC) wells remain below the action level of 0.013 mg/L, indicating adequate disposal cell performance. Sample results from background wells (0609 and 0716) are comparable to historical results and comparable to results from point of compliance wells from this event, which indicates no significant changes in general water quality.



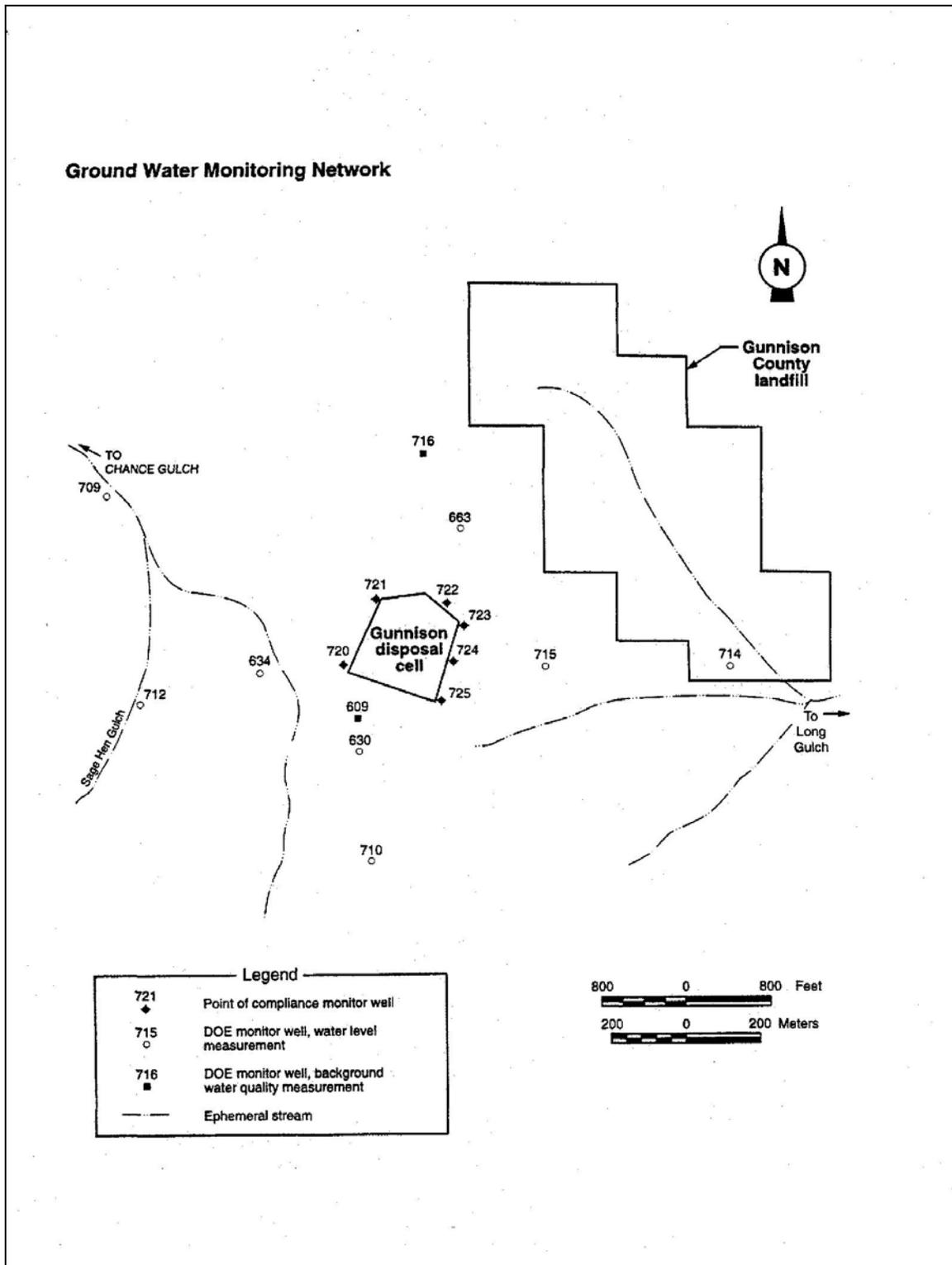
Sam Campbell
Site Lead, S.M. Stoller

9-25-06

Date



Gunnison, Colorado, Processing Site Sample Location Map



Gunnison, Colorado, Disposal Site Sample Location Map

Data Assessment Summary

Water Sampling Field Activities Verification Checklist

Project	<u>Gunnison, Colorado</u>	Date(s) of Water Sampling	<u>May 15-19, 2006</u>
Date(s) of Verification	<u>July 11, 2006</u>	Name of Verifier	<u>Lauren Goodknight</u>

	Response (Yes, No, NA)	Comments
1. Is the SAP the primary document directing field procedures? List other documents, SOP's, instructions.	<u>Yes</u>	<u>Work Order Letter dated April 18, 2006</u>
2. Were the sampling locations specified in the planning documents sampled?	<u>No</u>	<u>Well 0680 no longer exists.</u>
3. Was a pre-trip calibration conducted as specified in the above named documents?	<u>Yes</u>	
4. Was an operational check of the field equipment conducted twice daily? Did the operational checks meet criteria?	<u>Yes</u> <u>Yes</u>	
5. Were the number and types (alkalinity, temperature, Ec, pH, turbidity, DO, ORP) of field measurements taken as specified?	<u>No</u>	<u>Alkalinity was not recorded at well 0722; insufficient water for field measurements at well 0013.</u>
6. Was the Category of the well documented?	<u>Yes</u>	
7. Were the following conditions met when purging a Category I well: Was one pump/tubing volume purged prior to sampling?	<u>Yes</u>	
Did the water level stabilize prior to sampling?	<u>No</u>	<u>Water levels could not be obtained at well 0716; there was 1.43' of drawdown at well 0187.</u>
Did pH, specific conductance, and turbidity measurements stabilize prior to sampling?	<u>No</u>	<u>Turbidity at well 0468 was 16.6 and well 0081 was 17.1 NTUs.</u>
Was the flow rate less than 500 mL/min?	<u>Yes</u>	
If a portable pump was used, was there a 4-hour delay between pump installation and sampling?	<u>N/A</u>	

Water Sampling Field Activities Verification Checklist (continued)

	Response (Yes, No, NA)	Comments
8. Were the following conditions met when purging a Category II well:		
Was the flow rate less than 500 mL/min?	Yes	
Was one pump/tubing volume removed prior to sampling?	Yes	
9. Were duplicates taken at a frequency of one per 20 samples?	Yes	
10. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment?	Yes	
11. Were trip blanks prepared and included with each shipment of VOC samples?	N/A	
12. Were QC samples assigned a fictitious site identification number?	Yes	
Was the true identity of the samples recorded on the Quality Assurance Sample Log?	Yes	
13. Were samples collected in the containers specified?	Yes	
14. Were samples filtered and preserved as specified?	Yes	
15. Were the number and types of samples collected as specified?	Yes	
16. Were chain of custody records completed and was sample custody maintained?	Yes	
17. Are field data sheets signed and dated by both team members?	Yes	
18. Was all other pertinent information documented on the field data sheets?	Yes	
19. Was the presence or absence of ice in the cooler documented at every sample location?	Yes	
20. Were water levels measured at the locations specified in the planning documents?	No	Well 0716 was too deep (> 150') for the water level indicator on hand during sampling.

Laboratory Performance Assessment

General Information

Report Number (RIN): 06040365
Sample Event: May 15-19, 2006
Site(s): Gunnison, Colorado
Laboratory: Paragon Analytics, Fort Collins, Colorado
Work Order No.: 0605205
Analysis: Metals, Inorganics
Validator: Steve Donovan
Review Date: June 22, 2006

This validation was performed according to the *Environmental Procedures Catalog* (STO 6), "Standard Practice for Validation of Laboratory Data," GT-9(P). All analyses were successfully completed. The samples were prepared and analyzed using accepted procedures based on methods specified by line item code, which are listed in Table 2.

Table 2. Analytes and Methods

Analyte	Line Item Code	Prep Method	Analytical Method
Calcium, Magnesium, Potassium, Sodium	MET-A-020	SW-846 3005A	SW-846 6010B
Chloride, Cl	MIS-A-039	SW-846 9056	SW-846 9056
Iron, Fe	GJO-16	SW-846 3005A	SW-846 6010B
Manganese, Mn	GJO-17	SW-846 3005A	SW-846 6010B
Sulfate, SO ₄	MIS-A-044	SW-846 9056	SW-846 9056
Total Dissolved Solids (TDS)	WCH-A-033	MCAWW 160.1	MCAWW 160.1
Uranium, U	GJO-01	SW-846 3005A	SW-846 6020A

Sample Shipping/Receiving

Paragon Analytics in Fort Collins, Colorado, received 57 water samples on May 23, 2006, and an additional 29 water samples on May 2, 2006, accompanied by Chain of Custody (COC) forms. The COC forms were checked to confirm that all of the samples were listed on the forms and that signatures and dates were present indicating sample relinquishment and receipt. The sample submittal documents, including the COC form and the sample tickets, had no errors or omissions.

Preservation and Holding Times

The sample shipments were received cool and intact with the temperature within the chilled cooler of 15.8 °C, which does not comply with requirements. The temperature deviation was not sufficient to compromise the requested analyses. All samples were received in the correct container types and were preserved correctly for the requested analyses, and all samples were analyzed within the applicable holding times.

Data Qualifier Summary

The analytical results were qualified as listed in Table 3. Refer to the sections below for an explanation of the data qualifiers applied.

Table 3. Data Qualifier Summary

Sample Number	Location	Analyte	Flag	Reason
0605205-1	0002	Mn	UJ	Negative calibration blank
0605205-15	0102	Mn	UJ	Negative calibration blank
0605205-22	0127	Mn	NJ	Negative calibration blank
0605205-29	0186	Mn	UJ	Negative calibration blank
0605205-31	0188	Mn	UJ	Negative calibration blank
0605205-36	0667	Mn	NJ	Negative calibration blank
0605205-38	0685	Mn	NJ	Negative calibration blank
0605205-40	0722	Mn	UJ	Negative calibration blank
0605205-41	2330 (Equip Blank)	Mn	UJ	Negative calibration blank
0605205-41	2330 (Equip Blank)	U	U	Less than 5 times the method blank
0605205-43	2332 (Equip Blank)	Mn	UJ	Negative calibration blank
0605205-44	2333 (0186 Dup)	Mn	UJ	Negative calibration blank
0605205-45	0609	Mn	UJ	Negative calibration blank
0605205-47	0721	Mn	UJ	Negative calibration blank
0605205-48	0723	Mn	UJ	Negative calibration blank
0605205-49	0724	Mn	UJ	Negative calibration blank
0605205-50	0725	Mn	UJ	Negative calibration blank
0605205-51	2334 (Equip Blank)	Mn	UJ	Negative calibration blank
0605205-51	2334 (Equip Blank)	Ca	U	Less than 5 times the calibration blank
0605205-51	2334 (Equip Blank)	K	U	Less than 5 times the calibration blank
0605205-51	2334 (Equip Blank)	U	U	Less than 5 times the method blank
0605205-52	2335 (0716 Dup)	Fe	U	Less than 5 times the calibration blank
0605205-52	2335 (0716 Dup)	Mn	UJ	Negative calibration blank

Laboratory Instrument Calibration

Compliance requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable qualitative and quantitative data for all analytes. Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear curve. Compliance requirements for continuing calibration checks are established to ensure that the instrument continues to be capable of producing acceptable qualitative and quantitative data. All laboratory instrument calibrations were performed correctly in accordance with the cited methods.

Method SW-846 6010B

Calibrations for calcium, iron, magnesium, manganese, potassium, and sodium were performed on June 2, 2006, and June 8, 2006. The initial calibrations were performed using four calibration standards resulting in calibration curves with correlation coefficient (r^2) values greater

than 0.995. The absolute values of the calibration curve intercepts were less than three times the method detection limit (MDL). Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 24 CCVs. All calibration check results met the acceptance criteria. A reporting limit verification check was made at the required frequency to verify the linearity of the calibration curve near the practical quantitation limit. The check results were within the acceptance range.

Method SW-846 9056

Initial calibrations were performed for chloride and sulfate using five calibration standards on May 13, 2006. The resulting calibration curves had r^2 values greater than 0.995 and intercepts less than three times the MDL. Initial calibration and calibration check standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in three CCVs. All initial and continuing calibration verification results were within the acceptance range.

Method SW-846 6020A

Calibrations were performed for uranium on June 7, 2006, and June 9, 2006. The initial calibrations were performed using four calibration standards resulting in calibration curves with r^2 values greater than 0.995. The absolute values of the curve intercepts were less than three times the MDL. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 11 CCVs. All initial and continuing calibration verification results were within the acceptance range. Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curves near the practical quantitation limit. The check results were within the acceptance range. The mass calibration and resolution was checked at the beginning of each analytical run in accordance with the procedure. Internal standard recoveries were stable and within acceptance ranges.

Method MCAWW 160.1

There were no initial or continuing calibration requirements associated with the determination of total dissolved solids (TDS).

Method and Calibration Blanks

Method blanks were analyzed to assess any contamination that may have occurred during sample preparation. Calibration blanks were analyzed to assess instrument contamination prior to and during sample analysis. All initial and continuing calibration blank (CCB) results were below the practical quantitation limits for calcium, iron, magnesium, manganese, potassium, sodium, and uranium with the exception of 2 CCBs for iron, and 2 CCBs for manganese. There were no samples associated with these CCBs. In cases where blank concentration exceeded the instrument detection limit, the associated sample results were qualified with a "U" flag (not detected) when the sample result was greater than the MDL but less than five times the blank concentration. The method blank results for chloride, sulfate, and TDS were below the method detection limits.

Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Analysis

ICP interference check samples ICSEA and ICSEAB were analyzed at the required frequency to verify the instrumental interference and background correction factors. All check sample results met the acceptance criteria.

Matrix Spike Analysis

Matrix spike and matrix spike duplicate (MS/MSD) pairs were analyzed for all method 6010B and 6020A analytes as a measure of method performance in the sample matrix. The MS/MSD recoveries met the acceptance criteria for all analytes.

Laboratory Replicate Analysis

The relative percent difference values for the laboratory replicate sample results for all analytes were less than twenty percent, indicating acceptable laboratory precision.

Laboratory Control Samples

Laboratory control samples (LCS) were analyzed at the correct frequency to provide information on the accuracy of the analytical method and the overall laboratory performance, including sample preparation. The LCS results were acceptable for all analysis categories.

Metals Serial Dilution

Serial dilutions were performed during the metals analysis to monitor physical or chemical interferences that may exist in the sample matrix. Serial dilutions were prepared and analyzed for calcium, iron, magnesium, manganese, potassium, sodium, and uranium. The acceptance criteria were met for all analytes with the exception of one of the sodium checks. Other quality control checks did not indicate the presence of interferences.

Detection Limits/Dilutions

Samples were diluted in a consistent and acceptable manner when required. The samples were diluted prior to analysis of uranium to reduce interferences.

Completeness

Results were reported in the correct units for all analytes requested using contract-required laboratory qualifiers.

Chromatography Peak Integration

The integration of analyte peaks was reviewed for all chloride and sulfate data. There were no manual integrations performed and all peak integrations were satisfactory.

Cation/Anion Balance

The cation/anion balance was used to determine if major ion concentrations have been quantified correctly. The total cations should be equal to the total anions when expressed in milliequivalents per liter (meq/L). Table 4 shows the total cation and anion results for the disposal site wells and the charge balance, which is a relative percent difference calculation. The data were not presented for location 0722 because the alkalinity was not measured at this well. Typically, a charge balance difference of 10 percent is considered acceptable. The charge balance difference for all wells is less than 10 percent with the exception of well 0724. This well had alkalinity measured at a concentration 164 percent that of any value previously observed indicating a possible error in the alkalinity measurement.

Table 4. Comparison of Major Cations and Anions

Well	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
0609	4.01	4.60	6.96
0716	3.86	4.03	2.08
0720	6.31	6.69	2.92
0721	2.19	2.38	4.21
0723	3.41	3.28	1.94
0724	2.26	5.30	40.22
0725	3.78	4.43	7.93

Electronic Data Deliverable (EDD) File

The EDD file arrived on June 16, 2006. The Sample Management System EDD validation module was used to verify that the EDD file was complete and in compliance with requirements. The module compares the contents of the file to the requested analyses to ensure all and only the requested data are delivered. The contents of the EDD were manually examined to verify that the sample results accurately reflect the data contained in the sample data package.

SAMPLE MANAGEMENT SYSTEM

General Data Validation Worksheet

RIN: 06040365 **Lab Code:** PAR **Validator:** Steve Donovan **Validation Date:** 6/22/2006
Site: GUNNISON **Analysis Type:** **Metals** **General Chem** **Rad** **Organics**
of Samples: 57 **Matrix:** WATER **Requested Analysis Completed:** Yes

Chain of Custody
Present: OK **Signed:** OK **Dated:** OK

Sample
Integrity: OK **Preservation:** OK **Temperature:** No

Exceptions

Method	Analyte	Location	Ticket	Collection Date	Preparation Date	Analysis Date	Dilution Factor	Holding Time Met	Detection Limit Met

Comments: The reported detection limits are equal to or below contract requirements.
 All samples were analyzed within the applicable holding times.

SAMPLE MANAGEMENT SYSTEM
Metals Data Validation Worksheet

RIN: 06040365 Lab Code: PAR Date Due: 6/19/2006
 Matrix: Water Site Code: GUN Date Completed: 6/19/2006

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
Calcium	06/02/2006	0.0000	1.0000	OK	OK	OK	OK		101.0	104.0	1.0		3.0	92.2	
Calcium	06/02/2006								96.0	102.0	4.0	100.0	2.0	95.2	
Calcium	06/02/2006											98.0			
Iron	06/02/2006	0.0000	1.0000	OK	OK	OK	OK		90.0	93.0	4.0	100.0		94.1	
Iron	06/02/2006								85.0	88.0	3.0	96.0		92.0	
Iron	06/08/2006	0.0000	1.0000	OK	OK	OK	OK	OK	95.0	88.0	2.0	103.0	1.0	94.5	
Iron	06/08/2006											105.0		89.5	
Magnesium	06/02/2006	0.0000	1.0000	OK	OK	OK	OK		100.0	102.0	1.0	100.0	3.0	94.3	
Magnesium	06/02/2006								95.0	100.0	5.0	95.0	0.0	95.5	
Manganese	06/02/2006	0.0000	1.0000	OK	OK	OK	OK		99.0	102.0	3.0	91.0	1.0	104.0	
Manganese	06/02/2006								101.0	102.0	1.0	88.0		103.0	
Manganese	06/02/2006								96.0	100.0	4.0				
Manganese	06/08/2006	0.0000	1.0000	OK	OK	OK	OK	OK	97.0	95.0	0.0	90.0	1.0	102.0	
Manganese	06/08/2006											90.0		96.7	
Potassium	06/02/2006	0.0000	1.0000	OK	OK	OK	OK		93.0	95.0	2.0		7.0	87.3	
Potassium	06/02/2006								91.0	95.0	5.0			82.8	
Sodium	06/02/2006	0.0000	1.0000	OK	OK	OK	OK		89.0	91.0	1.0		1.0	88.0	
Sodium	06/02/2006												12.0	80.4	

Comments: _____

SAMPLE MANAGEMENT SYSTEM
Metals Data Validation Worksheet

RIN: 06040365 Lab Code: PAR Date Due: 6/19/2006
 Matrix: Water Site Code: GUN Date Completed: 6/19/2006

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R ²	ICV	CCV	ICB	CCB								
Sodium	06/08/2006	0.0000	1.0000	OK	OK	OK	OK	94.0	93.0	94.0	0.0		8.0	88.1	
Sodium	06/08/2006								90.0	93.0	3.0			91.2	
Uranium	06/07/2006	0.0000	1.0000	OK	OK	OK	OK		94.0	96.0	1.0	108.0	0.0	74.7	
Uranium	06/07/2006								85.0	79.0	2.0		7.0		
Uranium	06/07/2006								106.0	115.0	3.0		5.0		
Uranium	06/09/2006	0.0000	1.0000	OK	OK	OK	OK	105.0	105.0	106.0	1.0	110.0	10.0	89.5	

Comments: _____

SAMPLE MANAGEMENT SYSTEM
Inorganics Data Validation Worksheet

RIN: 06040365 **Lab Code:** PAR **Date Due:** 6/19/2006
Matrix: Water **Site Code:** GUN **Date Completed:** 6/19/2006

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R ²	ICV	CCV	ICB	CCB						
Chloride	05/24/2006	0	0.9999	OK	OK	OK	OK	OK	95.0				
Sulfate	05/24/2006	0	0.9999	OK	OK	OK	OK	OK	92.0				
Total Dissolved Solids	05/25/2006							OK	99.0			1.00	

Comments: _____

Sampling Quality Control Assessment

The following information summarizes and assesses quality control for this sampling event.

Sampling Protocol

All monitor well sample results were qualified with an “F” flag in the database indicating the wells were purged and sampled using the low-flow sampling method. Additionally, sample results from wells 0012, 0013, 0187, and 0716 were qualified with a “Q” flag indicating the data are qualitative because this well was purged and sampled using Category II protocol.

Equipment Blank Assessment

Three equipment blanks were collected and analyzed to assess the extent of cross-contamination of samples resulting from ineffective decontamination of non-dedicated equipment. The results for the equipment blanks that were collected during this sampling event were all below the method detection limits indicating no cross-contamination.

Field Duplicate Assessment

Field duplicate samples were collected and analyzed as an indication of overall precision of the measurement process. The precision observed includes both field and laboratory precision and has more variability than laboratory duplicates which measures only laboratory performance. Duplicate samples were collected from wells 0161, 0186, and 0716. The duplicate results were acceptable, meeting the EPA recommended laboratory duplicate criteria of less than 20 percent relative percent difference (RPD) for results greater than five times the reporting limit with the following exception: the manganese duplicate result from location 0161 had an RPD of 38 percent. Review of the data did not indicate a laboratory error and the data are acceptable as qualified.

Certification

All laboratory analytical quality control criteria were met except as qualified in this report. The data qualifiers listed on the SEEPro database reports are defined on the last page of each report. All data in this package are considered validated and available for use.

Laboratory Coordinator: Steve Donovan 9-25-2006
Steve Donovan Date

Data Validation Lead: Steve Donovan 9-25-2006
Steve Donovan Date

Attachment 1
Assessment of Anomalous Data

Minimums and Maximums Report

Minimums and Maximums Report

The Minimums and Maximums Report is generated by a data validation application used to query the SEEPro database. The application compares the new data set with historical data and lists all new data that fall outside the historical data range. Data listed in the report require further review if:

- (1) Identified low concentrations are above the required detection limit and are not the result of improved detection limits.
- (2) The concentration detected is not within 50 percent of historical minimum or maximum values.
- (3) There were five or more historical sample results for comparison.

Eight results from this sampling event require further review and are listed on the Anomalous Data Review Checksheet.

The selenium result from location 0880 and the bromide and radium-226 results from location 0906 were listed on the Anomalous Data Review Checksheet for the November 2005 sampling event as anomalously low. The result for radium-226 for location 0906 from this sampling event returned to a value within the previous historical range. The selenium result for location 0880 and the bromide result for location 0906 remained at reduced concentrations.

Data Validation Minimums and Maximums Report - No Field Parameters
 Laboratory: PARAGON (Fort Collins, CO)
 RIN: 06040365
 Comparison: History Begin Date: 1/6/1996
 Report Date: 7/13/2006

Site Code	Location Code	Sample Date	Analyte	Current			Historical Maximum			Historical Minimum			Count	
				Result	Qualifiers <i>Lab Data</i>		Result	Qualifiers <i>Lab Data</i>		Result	Qualifiers <i>Lab Data</i>		N	N Below Detect
GUN01	0013	05/18/2006	Manganese	0.017			0.001	U		0.00008	B	UF	12	10
GUN01	0080	05/17/2006	Uranium	0.0058			0.0045			0.0013			6	0
GUN01	0081	05/17/2006	Uranium	0.00027			0.013			0.0037		F	5	0
GUN01	0082	05/17/2006	Uranium	0.0036			0.0155		F	0.0064		F	5	0
GUN01	0102	05/16/2006	Uranium	0.0033			0.0043			0.0034		F	6	0
GUN01	0106	05/15/2006	Uranium	0.0029			0.0014		F	0.0002	U		13	7
GUN01	0112	05/15/2006	Manganese	7.5			19.5			10		F	6	0
GUN01	0112	05/15/2006	Uranium	0.05			0.021		F	0.0035		F	6	0
GUN01	0113	05/18/2006	Manganese	1.4			7.37			1.6		F	12	0
GUN01	0113	05/18/2006	Uranium	0.08			0.361			0.081		F	12	0
GUN01	0125	05/17/2006	Uranium	0.0089			0.019			0.009	E	F	8	0
GUN01	0160	05/16/2006	Uranium	0.024			0.022		F	0.0179	E		9	0
GUN01	0161	05/16/2006	Manganese	0.063			0.0201		F	0.0054		F	9	0
GUN01	0161	05/16/2006	Uranium	0.018			0.016		F	0.01	E		9	0
GUN01	0181	05/16/2006	Manganese	0.15			0.387			0.16		F	5	0
GUN01	0183	05/16/2006	Uranium	0.067			0.06		F	0.0539			9	0
GUN01	0186	05/17/2006	Uranium	0.023			0.0421			0.024		F	9	0
GUN01	0189	05/16/2006	Manganese	0.84			1.04		F	0.862		L	11	0
GUN01	0468	05/16/2006	Uranium	0.029			0.027			0.00037	B	F	8	0
GUN01	0665	05/15/2006	Manganese	0.039			0.031			0.0096	B		6	0

Data Validation Minimums and Maximums Report - No Field Parameters
 Laboratory: PARAGON (Fort Collins, CO)
 RIN: 06040365
 Comparison: History Begin Date: 1/6/1996
 Report Date: 7/13/2006

Site Code	Location Code	Sample Date	Analyte	Current			Historical Maximum			Historical Minimum			Count	
				Result	Qualifiers		Result	Qualifiers		Result	Qualifiers		N	N Below Detect
					Lab	Data		Lab	Data		Lab	Data		
GUN08	0609	05/19/2006	Calcium	19			36.4			31.8			8	0
GUN08	0609	05/19/2006	Magnesium	1.5			3.37			2.91			8	0
GUN08	0609	05/19/2006	Manganese	0.00023	U		0.0242			0.0064	B		8	0
GUN08	0609	05/19/2006	Potassium	11			9.78			8.84			8	0
GUN08	0609	05/19/2006	Sodium	61			90.9			80.4			8	0
GUN08	0609	05/19/2006	Uranium	0.0012			0.004			0.0032			8	0
GUN08	0716	05/18/2006	Calcium	40			39.2			27.5		L	7	0
GUN08	0716	05/18/2006	Iron	0.016	B		0.153		F	0.0239	B	UL	7	1
GUN08	0716	05/18/2006	Manganese	0.053			0.354		F	0.138		L	7	0
GUN08	0716	05/18/2006	Sodium	27			40.2			27.5		L	7	0
GUN08	0716	05/18/2006	Sulfate	32			28.4		J	26.1		L	7	0
GUN08	0720	05/18/2006	Calcium	66			62.9			56.6			8	0
GUN08	0720	05/18/2006	Manganese	0.018			0.0605			0.0416			8	0
GUN08	0720	05/18/2006	Potassium	11			10.8			9.08			8	0
GUN08	0720	05/18/2006	Sodium	51			66.2			59.6			8	0
GUN08	0721	05/18/2006	Chloride	4.4			4.36			3.79			10	0
GUN08	0721	05/18/2006	Iron	0.018	B		0.009	U		0.001	U		10	7
GUN08	0721	05/18/2006	Sodium	12	E		15.3			13.9			10	0
GUN08	0721	05/18/2006	Sulfate	7.4			8.83			7.48			10	0
GUN08	0722	05/18/2006	Iron	0.017	B		0.0103	B	U	0.001	U		9	8

Data Validation Minimums and Maximums Report - No Field Parameters
 Laboratory: PARAGON (Fort Collins, CO)
 RIN: 06040365
 Comparison: History Begin Date: 1/6/1996
 Report Date: 7/13/2006

Site Code	Location Code	Sample Date	Analyte	Current			Historical Maximum			Historical Minimum			Count	
				Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect
GUN08	0722	05/18/2006	Sodium	14			16.7			15.4			9	0
GUN08	0722	05/18/2006	Sulfate	10			11.1			10.2			9	0
GUN08	0723	05/19/2006	Chloride	15			13.5		L	8.48			8	0
GUN08	0723	05/19/2006	Sodium	16			23.9		L	17.6			8	0
GUN08	0724	05/19/2006	Calcium	27			33.3			27.9		L	9	0
GUN08	0724	05/19/2006	Chloride	5.2			5.02		L	0.334	B	UL	9	1
GUN08	0724	05/19/2006	Magnesium	2.8			3.72		L	2.82		L	9	0
GUN08	0724	05/19/2006	Sodium	14			17.9		L	16.3		L	9	0
GUN08	0725	05/19/2006	Calcium	41			37.5		L	31.8			8	0
GUN08	0725	05/19/2006	Manganese	0.00023	U		0.68			0.0086	B		8	0
GUN08	0725	05/19/2006	Sodium	30			48.7			35.2			8	0

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- * Replicate analysis not within control limits.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X,Y,Z Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

F Low flow sampling method used.
L Less than 3 bore volumes purged prior to sampling.
U Parameter analyzed for but was not detected.

G Possible grout contamination, pH > 9.
Q Qualitative result due to sampling technique.
X Location is undefined.

J Estimated value.
R Unusable result.

Anomalous Data Review Checksheet

Attachment 2
Data Presentation

**Gunnison Processing Site
Ground Water Quality Data**

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0002 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	10	-	15	273		F	#		
Manganese	mg/L	05/16/2006	0001	10	-	15	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	10	-	15	67.3		F	#		
pH	s.u.	05/16/2006	N001	10	-	15	7.44		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	10	-	15	562		F	#		
Temperature	C	05/16/2006	N001	10	-	15	13.01		F	#		
Turbidity	NTU	05/16/2006	N001	10	-	15	1.31		F	#		
Uranium	mg/L	05/16/2006	0001	10	-	15	0.0026		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0005 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	10	-	15	223		F	#		
Manganese	mg/L	05/15/2006	0001	10	-	15	0.7		F	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	10	-	15	-116.5		F	#		
pH	s.u.	05/15/2006	N001	10	-	15	7.32		F	#		
Specific Conductance	umhos/cm	05/15/2006	N001	10	-	15	458		F	#		
Temperature	C	05/15/2006	N001	10	-	15	9.95		F	#		
Turbidity	NTU	05/15/2006	N001	10	-	15	2.56		F	#		
Uranium	mg/L	05/15/2006	0001	10	-	15	0.044		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0006 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	10	-	15	280		F	#		
Manganese	mg/L	05/15/2006	0001	10	-	15	1.4		F	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	10	-	15	106.3		F	#		
pH	s.u.	05/15/2006	N001	10	-	15	6.61		F	#		
Specific Conductance	umhos/cm	05/15/2006	N001	10	-	15	2185		F	#		
Temperature	C	05/15/2006	N001	10	-	15	11.57		F	#		
Turbidity	NTU	05/15/2006	N001	10	-	15	0.82		F	#		
Uranium	mg/L	05/15/2006	0001	10	-	15	1.2		F	#	.000068	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0012 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	10	- 15	229		FQ	#		
Manganese	mg/L	05/15/2006	0001	10	- 15	0.18		FQ	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	10	- 15	19.4		FQ	#		
pH	s.u.	05/15/2006	N001	10	- 15	7.16		FQ	#		
Specific Conductance	umhos/cm	05/15/2006	N001	10	- 15	1111		FQ	#		
Temperature	C	05/15/2006	N001	10	- 15	12.58		FQ	#		
Turbidity	NTU	05/15/2006	N001	10	- 15	1.86		FQ	#		
Uranium	mg/L	05/15/2006	0001	10	- 15	0.39		FQ	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0013 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Manganese	mg/L	05/18/2006	0001	11 - 16	0.017		FQ	#	.00023	
Uranium	mg/L	05/18/2006	0001	11 - 16	0.04		FQ	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0062 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	47.9	-	57.9		F	#		
Manganese	mg/L	05/18/2006	0001	47.9	-	57.9		F	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	47.9	-	57.9		F	#		
pH	s.u.	05/18/2006	N001	47.9	-	57.9		F	#		
Specific Conductance	umhos /cm	05/18/2006	N001	47.9	-	57.9		F	#		
Temperature	C	05/18/2006	N001	47.9	-	57.9		F	#		
Turbidity	NTU	05/18/2006	N001	47.9	-	57.9		F	#		
Uranium	mg/L	05/18/2006	0001	47.9	-	57.9		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0063 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	87.9	-	97.9		F	#		
Manganese	mg/L	05/18/2006	0001	87.9	-	97.9		F	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	87.9	-	97.9		F	#		
pH	s.u.	05/18/2006	N001	87.9	-	97.9		F	#		
Specific Conductance	umhos/cm	05/18/2006	N001	87.9	-	97.9		F	#		
Temperature	C	05/18/2006	N001	87.9	-	97.9		F	#		
Turbidity	NTU	05/18/2006	N001	87.9	-	97.9		F	#		
Uranium	mg/L	05/18/2006	0001	87.9	-	97.9		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0064 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	86.7	-	96.7		F	#		
Manganese	mg/L	05/17/2006	0001	86.7	-	96.7		F	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	86.7	-	96.7		F	#		
pH	s.u.	05/17/2006	N001	86.7	-	96.7		F	#		
Specific Conductance	umhos /cm	05/17/2006	N001	86.7	-	96.7		F	#		
Temperature	C	05/17/2006	N001	86.7	-	96.7		F	#		
Turbidity	NTU	05/17/2006	N001	86.7	-	96.7		F	#		
Uranium	mg/L	05/17/2006	0001	86.7	-	96.7		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0065 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	49.7	-	59.7		F	#		
Manganese	mg/L	05/16/2006	0001	49.7	-	59.7		F	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	49.7	-	59.7		F	#		
pH	s.u.	05/16/2006	N001	49.7	-	59.7		F	#		
Specific Conductance	umhos /cm	05/16/2006	N001	49.7	-	59.7		F	#		
Temperature	C	05/16/2006	N001	49.7	-	59.7		F	#		
Turbidity	NTU	05/16/2006	N001	49.7	-	59.7		F	#		
Uranium	mg/L	05/16/2006	0001	49.7	-	59.7		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0066 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	40.2	-	50.2		F	#		
Manganese	mg/L	05/16/2006	0001	40.2	-	50.2		F	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	40.2	-	50.2		F	#		
pH	s.u.	05/16/2006	N001	40.2	-	50.2		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	40.2	-	50.2		F	#		
Temperature	C	05/16/2006	N001	40.2	-	50.2		F	#		
Turbidity	NTU	05/16/2006	N001	40.2	-	50.2		F	#		
Uranium	mg/L	05/16/2006	0001	40.2	-	50.2		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0067 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	39.67	-	49.67		F	#		
Manganese	mg/L	05/17/2006	0001	39.67	-	49.67		F	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	39.67	-	49.67		F	#		
pH	s.u.	05/17/2006	N001	39.67	-	49.67		F	#		
Specific Conductance	umhos /cm	05/17/2006	N001	39.67	-	49.67		F	#		
Temperature	C	05/17/2006	N001	39.67	-	49.67		F	#		
Turbidity	NTU	05/17/2006	N001	39.67	-	49.67		F	#		
Uranium	mg/L	05/17/2006	0001	39.67	-	49.67		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site

REPORT DATE: 7/14/2006

Location: 0080 WELL Key to pump house for well 080 can be obtained from house to the southwest, if needed.

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	N001	-	234			#		
Manganese	mg/L	05/17/2006	N001	-	0.097			#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	-	-115.6			#		
pH	s.u.	05/17/2006	N001	-	7.63			#		
Specific Conductance	umhos /cm	05/17/2006	N001	-	457			#		
Temperature	C	05/17/2006	N001	-	9.89			#		
Turbidity	NTU	05/17/2006	N001	-	1.62			#		
Uranium	mg/L	05/17/2006	N001	-	0.0058			#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0081 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	-	194			#		
Manganese	mg/L	05/17/2006	N001	-	0.19			#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	-	-200.7			#		
pH	s.u.	05/17/2006	N001	-	7.66			#		
Specific Conductance	umhos /cm	05/17/2006	N001	-	342			#		
Temperature	C	05/17/2006	N001	-	13.98			#		
Turbidity	NTU	05/17/2006	N001	-	17.1			#		
Uranium	mg/L	05/17/2006	N001	-	0.00027			#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0082 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	-	273			#		
Manganese	mg/L	05/17/2006	N001	-	0.16			#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	-	-156.4			#		
pH	s.u.	05/17/2006	N001	-	7.47			#		
Specific Conductance	umhos /cm	05/17/2006	N001	-	475			#		
Temperature	C	05/17/2006	N001	-	8.33			#		
Turbidity	NTU	05/17/2006	N001	-	1.24			#		
Uranium	mg/L	05/17/2006	N001	-	0.0036			#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0102 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	42	-	47	246		F	#		
Manganese	mg/L	05/16/2006	0001	42	-	47	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	42	-	47	64.8		F	#		
pH	s.u.	05/16/2006	N001	42	-	47	7.48		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	42	-	47	540		F	#		
Temperature	C	05/16/2006	N001	42	-	47	13.31		F	#		
Turbidity	NTU	05/16/2006	N001	42	-	47	0.76		F	#		
Uranium	mg/L	05/16/2006	0001	42	-	47	0.0033		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0105 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	42	- 47	222		F	#		
Manganese	mg/L	05/15/2006	0001	42	- 47	2.3		F	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	42	- 47	-63.9		F	#		
pH	s.u.	05/15/2006	N001	42	- 47	7.05		F	#		
Specific Conductance	umhos /cm	05/15/2006	N001	42	- 47	456		F	#		
Temperature	C	05/15/2006	N001	42	- 47	11.36		F	#		
Turbidity	NTU	05/15/2006	N001	42	- 47	2.63		F	#		
Uranium	mg/L	05/15/2006	0001	42	- 47	0.042		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0106 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	34	-	39	86		F	#		
Manganese	mg/L	05/15/2006	0001	34	-	39	9.6		F	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	34	-	39	40.2		F	#		
pH	s.u.	05/15/2006	N001	34	-	39	5.77		F	#		
Specific Conductance	umhos/cm	05/15/2006	N001	34	-	39	1872		F	#		
Temperature	C	05/15/2006	N001	34	-	39	12.48		F	#		
Turbidity	NTU	05/15/2006	N001	34	-	39	2.04		F	#		
Uranium	mg/L	05/15/2006	0001	34	-	39	0.0029		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0112 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	40	-	45	115		F	#		
Manganese	mg/L	05/15/2006	0001	40	-	45	7.5		F	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	40	-	45	9.3		F	#		
pH	s.u.	05/15/2006	N001	40	-	45	6.2		F	#		
Specific Conductance	umhos/cm	05/15/2006	N001	40	-	45	1070		F	#		
Temperature	C	05/15/2006	N001	40	-	45	12.08		F	#		
Turbidity	NTU	05/15/2006	N001	40	-	45	2.1		F	#		
Uranium	mg/L	05/15/2006	0001	40	-	45	0.05		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0113 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	41	- 46	215		F	#		
Manganese	mg/L	05/18/2006	0001	41	- 46	1.4		F	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	41	- 46	50		F	#		
pH	s.u.	05/18/2006	N001	41	- 46	7.1		F	#		
Specific Conductance	umhos /cm	05/18/2006	N001	41	- 46	467		F	#		
Temperature	C	05/18/2006	N001	41	- 46	14.75		F	#		
Turbidity	NTU	05/18/2006	N001	41	- 46	2.85		F	#		
Uranium	mg/L	05/18/2006	0001	41	- 46	0.08		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0125 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	17.8	-	22.8		F	#		
Manganese	mg/L	05/17/2006	0001	17.8	-	22.8	0.0052	F	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	17.8	-	22.8	149.5	F	#		
pH	s.u.	05/17/2006	N001	17.8	-	22.8	7.37	F	#		
Specific Conductance	umhos /cm	05/17/2006	N001	17.8	-	22.8	450	F	#		
Temperature	C	05/17/2006	N001	17.8	-	22.8	9.48	F	#		
Turbidity	NTU	05/17/2006	N001	17.8	-	22.8	1.48	F	#		
Uranium	mg/L	05/17/2006	0001	17.8	-	22.8	0.0089	F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0126 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	54	-	59	246		F	#		
Manganese	mg/L	05/17/2006	0001	54	-	59	0.0013	B	F	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	54	-	59	106.5		F	#		
pH	s.u.	05/17/2006	N001	54	-	59	7.3		F	#		
Specific Conductance	umhos/cm	05/17/2006	N001	54	-	59	578		F	#		
Temperature	C	05/17/2006	N001	54	-	59	10.7		F	#		
Turbidity	NTU	05/17/2006	N001	54	-	59	4.37		F	#		
Uranium	mg/L	05/17/2006	0001	54	-	59	0.012		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0127 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	94	-	99	253		F	#		
Manganese	mg/L	05/17/2006	0001	94	-	99	0.00099	B	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	94	-	99	89.3		F	#		
pH	s.u.	05/17/2006	N001	94	-	99	7.44		F	#		
Specific Conductance	umhos/cm	05/17/2006	N001	94	-	99	981		F	#		
Temperature	C	05/17/2006	N001	94	-	99	11.24		F	#		
Turbidity	NTU	05/17/2006	N001	94	-	99	4.13		F	#		
Uranium	mg/L	05/17/2006	0001	94	-	99	0.03		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0135 WELL Well is knocked over!!

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	18	-	23	140		F	#		
Manganese	mg/L	05/17/2006	0001	18	-	23	3.3		F	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	18	-	23	-36.3		F	#		
pH	s.u.	05/17/2006	N001	18	-	23	7.13		F	#		
Specific Conductance	umhos/cm	05/17/2006	N001	18	-	23	342		F	#		
Temperature	C	05/17/2006	N001	18	-	23	9.62		F	#		
Turbidity	NTU	05/17/2006	N001	18	-	23	1.7		F	#		
Uranium	mg/L	05/17/2006	0001	18	-	23	0.00074		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0136 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	53	-	58	314		F	#		
Manganese	mg/L	05/17/2006	0001	53	-	58	0.14		F	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	53	-	58	-74		F	#		
pH	s.u.	05/17/2006	N001	53	-	58	7.57		F	#		
Specific Conductance	umhos/cm	05/17/2006	N001	53	-	58	765		F	#		
Temperature	C	05/17/2006	N001	53	-	58	13.43		F	#		
Turbidity	NTU	05/17/2006	N001	53	-	58	15.1		F	#		
Uranium	mg/L	05/17/2006	0001	53	-	58	0.021		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0160 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	51	-	56	306		F	#		
Manganese	mg/L	05/16/2006	0001	51	-	56	0.0028	B	F	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	51	-	56	112.7		F	#		
pH	s.u.	05/16/2006	N001	51	-	56	6.75		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	51	-	56	756		F	#		
Temperature	C	05/16/2006	N001	51	-	56	7.52		F	#		
Turbidity	NTU	05/16/2006	N001	51	-	56	4.39		F	#		
Uranium	mg/L	05/16/2006	0001	51	-	56	0.024		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0161 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Qualifiers		Detection Limit	Uncertainty
							Lab	Data QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	93	- 98	243		F #		
Manganese	mg/L	05/16/2006	0001	93	- 98	0.043		F #	.00023	
Manganese	mg/L	05/16/2006	0002	93	- 98	0.063		F #	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	93	- 98	106.7		F #		
pH	s.u.	05/16/2006	N001	93	- 98	6.75		F #		
Specific Conductance	umhos/cm	05/16/2006	N001	93	- 98	743		F #		
Temperature	C	05/16/2006	N001	93	- 98	7.38		F #		
Turbidity	NTU	05/16/2006	N001	93	- 98	4.77		F #		
Uranium	mg/L	05/16/2006	0001	93	- 98	0.018		F #	.0000034	
Uranium	mg/L	05/16/2006	0002	93	- 98	0.018		F #	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0181 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	18	- 23	254		F	#		
Manganese	mg/L	05/16/2006	0001	18	- 23	0.15		F	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	18	- 23	49.4		F	#		
pH	s.u.	05/16/2006	N001	18	- 23	7.15		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	18	- 23	578		F	#		
Temperature	C	05/16/2006	N001	18	- 23	9.22		F	#		
Turbidity	NTU	05/16/2006	N001	18	- 23	4.3		F	#		
Uranium	mg/L	05/16/2006	0001	18	- 23	0.015		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0183 WELL Casing bent.

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	93	-	98	354		F	#		
Manganese	mg/L	05/16/2006	0001	93	-	98	0.002	B	F	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	93	-	98	81.9		F	#		
pH	s.u.	05/16/2006	N001	93	-	98	6.8		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	93	-	98	1091		F	#		
Temperature	C	05/16/2006	N001	93	-	98	9.69		F	#		
Turbidity	NTU	05/16/2006	N001	93	-	98	3.8		F	#		
Uranium	mg/L	05/16/2006	0001	93	-	98	0.067		F	#	.000017	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0186 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	53	-	58	298		F	#		
Manganese	mg/L	05/17/2006	0001	53	-	58	0.00023	U	FJ	#	.00023	
Manganese	mg/L	05/17/2006	0002	53	-	58	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	53	-	58	127.5		F	#		
pH	s.u.	05/17/2006	N001	53	-	58	7.59		F	#		
Specific Conductance	umhos/cm	05/17/2006	N001	53	-	58	725		F	#		
Temperature	C	05/17/2006	N001	53	-	58	7.87		F	#		
Turbidity	NTU	05/17/2006	N001	53	-	58	0.75		F	#		
Uranium	mg/L	05/17/2006	0001	53	-	58	0.023		F	#	.000034	
Uranium	mg/L	05/17/2006	0002	53	-	58	0.023		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0187 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/17/2006	0001	93	- 98	792		FQ	#		
Manganese	mg/L	05/17/2006	0001	93	- 98	2.2		FQ	#	.00023	
Oxidation Reduction Potential	mV	05/17/2006	N001	93	- 98	30.3		FQ	#		
pH	s.u.	05/17/2006	N001	93	- 98	6.61		FQ	#		
Specific Conductance	umhos /cm	05/17/2006	N001	93	- 98	1115		FQ	#		
Temperature	C	05/17/2006	N001	93	- 98	10.24		FQ	#		
Turbidity	NTU	05/17/2006	N001	93	- 98	5.24		FQ	#		
Uranium	mg/L	05/17/2006	0001	93	- 98	0.042		FQ	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0188 WELL

Parameter	Units	Sample		Depth Range			Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID	(Ft BLS)				Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	53	-	58	248		F	#		
Manganese	mg/L	05/16/2006	0001	53	-	58	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	53	-	58	100.2		F	#		
pH	s.u.	05/16/2006	N001	53	-	58	7.26		F	#		
Specific Conductance	umhos/cm	05/16/2006	N001	53	-	58	757		F	#		
Temperature	C	05/16/2006	N001	53	-	58	8.74		F	#		
Turbidity	NTU	05/16/2006	N001	53	-	58	0.94		F	#		
Uranium	mg/L	05/16/2006	0001	53	-	58	0.039		F	#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0189 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	93	- 98	965		F	#		
Manganese	mg/L	05/16/2006	0001	93	- 98	0.84		F	#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	93	- 98	-25.4		F	#		
pH	s.u.	05/16/2006	N001	93	- 98	6.48		F	#		
Specific Conductance	umhos /cm	05/16/2006	N001	93	- 98	1895		F	#		
Temperature	C	05/16/2006	N001	93	- 98	11.18		F	#		
Turbidity	NTU	05/16/2006	N001	93	- 98	2.52		F	#		
Uranium	mg/L	05/16/2006	0001	93	- 98	0.016		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0468 WELL MARKS, 529 TOMICHI TRAIL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	-	248			#		
Manganese	mg/L	05/16/2006	N001	-	0.26			#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	-	-96.9			#		
pH	s.u.	05/16/2006	N001	-	7.35			#		
Specific Conductance	umhos /cm	05/16/2006	N001	-	703			#		
Temperature	C	05/16/2006	N001	-	8.36			#		
Turbidity	NTU	05/16/2006	N001	-	16.6			#		
Uranium	mg/L	05/16/2006	N001	-	0.029			#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0469 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	N001	-	99			#		
Manganese	mg/L	05/15/2006	N001	-	0.014			#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	-	81.5			#		
pH	s.u.	05/15/2006	N001	-	7			#		
Specific Conductance	umhos /cm	05/15/2006	N001	-	305			#		
Temperature	C	05/15/2006	N001	-	14.9			#		
Turbidity	NTU	05/15/2006	N001	-	6.23			#		
Uranium	mg/L	05/15/2006	N001	-	0.0021			#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0665 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	N001	-	157			#		
Manganese	mg/L	05/15/2006	N001	-	0.039			#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	-	124.7			#		
pH	s.u.	05/15/2006	N001	-	7.14			#		
Specific Conductance	umhos /cm	05/15/2006	N001	-	275			#		
Temperature	C	05/15/2006	N001	-	12.47			#		
Turbidity	NTU	05/15/2006	N001	-	0.46			#		
Uranium	mg/L	05/15/2006	N001	-	0.0026			#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0667 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	N001	-	103			#		
Manganese	mg/L	05/15/2006	N001	-	0.001	B	J	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	-	138.7			#		
pH	s.u.	05/15/2006	N001	-	7.7			#		
Specific Conductance	umhos /cm	05/15/2006	N001	-	187			#		
Temperature	C	05/15/2006	N001	-	15.79			#		
Turbidity	NTU	05/15/2006	N001	-	0.56			#		
Uranium	mg/L	05/15/2006	N001	-	0.00057			#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0683 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	N001	-	131			#		
Manganese	mg/L	05/15/2006	N001	-	0.002	B		#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	-	84.5			#		
pH	s.u.	05/15/2006	N001	-	7.46			#		
Specific Conductance	umhos /cm	05/15/2006	N001	-	238			#		
Temperature	C	05/15/2006	N001	-	14.84			#		
Turbidity	NTU	05/15/2006	N001	-	0.58			#		
Uranium	mg/L	05/15/2006	N001	-	0.0017			#	.000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0685 WELL

Parameter	Units	Sample		Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID			Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	N001	-	126			#		
Manganese	mg/L	05/15/2006	N001	-	0.00082	B	J	#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	-	123			#		
pH	s.u.	05/15/2006	N001	-	7.47			#		
Specific Conductance	umhos/cm	05/15/2006	N001	-	245			#		
Temperature	C	05/15/2006	N001	-	15.56			#		
Turbidity	NTU	05/15/2006	N001	-	0.65			#		
Uranium	mg/L	05/15/2006	N001	-	0.0025			#	.0000034	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- * Replicate analysis not within control limits.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X,Y,Z Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

- F Low flow sampling method used.
- L Less than 3 bore volumes purged prior to sampling.
- U Parameter analyzed for but was not detected.
- G Possible grout contamination, pH > 9.
- Q Qualitative result due to sampling technique.
- X Location is undefined.
- J Estimated value.
- R Unusable result.

QA QUALIFIER:

- # Validated according to quality assurance guidelines.

**Gunnison Processing Site
Surface Water Quality Data**

Ground Water Quality Data by Location (USEE102) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0248 SURFACE LOCATION

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	182			#		
Manganese	mg/L	05/18/2006	0001	0.078			#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	34.9			#		
pH	s.u.	05/18/2006	N001	8.06			#		
Specific Conductance	umhos/cm	05/18/2006	N001	489			#		
Temperature	C	05/18/2006	N001	12.32			#		
Turbidity	NTU	05/18/2006	N001	2.26			#		
Uranium	mg/L	05/18/2006	0001	0.019			#	.0000034	

Ground Water Quality Data by Location (USEE102) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0777 SURFACE LOCATION Tomichi Creek SSE of well 0058

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	143			#		
Manganese	mg/L	05/16/2006	0001	0.095			#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	46.9			#		
pH	s.u.	05/16/2006	N001	8.23			#		
Specific Conductance	umhos/cm	05/16/2006	N001	301			#		
Temperature	C	05/16/2006	N001	17.44			#		
Turbidity	NTU	05/16/2006	N001	11.4			#		
Uranium	mg/L	05/16/2006	0001	0.0043			#	.0000034	

Ground Water Quality Data by Location (USEE102) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0780 SURFACE LOCATION NE CORNER VALCO PIT

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	189			#		
Manganese	mg/L	05/18/2006	0001	0.0061			#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	63.3			#		
pH	s.u.	05/18/2006	N001	8.22			#		
Specific Conductance	umhos/cm	05/18/2006	N001	513			#		
Temperature	C	05/18/2006	N001	13.18			#		
Turbidity	NTU	05/18/2006	N001	3.54			#		
Uranium	mg/L	05/18/2006	0001	0.021			#	.0000034	

Ground Water Quality Data by Location (USEE102) FOR SITE GUN01, Gunnison Processing Site

REPORT DATE: 7/14/2006

Location: 0792 SURFACE LOCATION KMONKS, SURFACE LOCATION, 8/11/94

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/16/2006	0001	91			#		
Manganese	mg/L	05/16/2006	0001	0.013			#	.00023	
Oxidation Reduction Potential	mV	05/16/2006	N001	-45			#		
pH	s.u.	05/16/2006	N001	8.33			#		
Specific Conductance	umhos/cm	05/16/2006	N001	167			#		
Temperature	C	05/16/2006	N001	12.38			#		
Turbidity	NTU	05/16/2006	N001	15.8			#		
Uranium	mg/L	05/16/2006	0001	0.00057			#	.0000034	

Ground Water Quality Data by Location (USEE102) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/14/2006
 Location: 0795 SURFACE LOCATION KMONKS, SURFACE LOCATION, 8/11/94

Parameter	Units	Sample		Result	Qualifiers			Detection Limit	Uncertainty
		Date	ID		Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/15/2006	0001	93			#		
Manganese	mg/L	05/15/2006	0001	0.014			#	.00023	
Oxidation Reduction Potential	mV	05/15/2006	N001	102.9			#		
pH	s.u.	05/15/2006	N001	8.37			#		
Specific Conductance	umhos/cm	05/15/2006	N001	169			#		
Temperature	C	05/15/2006	N001	11.05			#		
Turbidity	NTU	05/15/2006	N001	13.8			#		
Uranium	mg/L	05/15/2006	0001	0.00053			#	.0000034	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- * Replicate analysis not within control limits.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X,Y,Z Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

- F Low flow sampling method used.
- L Less than 3 bore volumes purged prior to sampling.
- U Parameter analyzed for but was not detected.
- G Possible grout contamination, pH > 9.
- Q Qualitative result due to sampling technique.
- X Location is undefined.
- J Estimated value.
- R Unusable result.

QA QUALIFIER:

- # Validated according to quality assurance guidelines.

**Gunnison Disposal Site
Ground Water Quality Data**

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0609 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
						Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/19/2006	0001	136.09 - 146.09	132		F	#		
Calcium	mg/L	05/19/2006	0001	136.09 - 146.09	19		F	#	.0056	
Chloride	mg/L	05/19/2006	0001	136.09 - 146.09	15		F	#	.4	
Iron	mg/L	05/19/2006	0001	136.09 - 146.09	0.014	U	F	#	.014	
Magnesium	mg/L	05/19/2006	0001	136.09 - 146.09	1.5		F	#	.0068	
Manganese	mg/L	05/19/2006	0001	136.09 - 146.09	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/19/2006	N001	136.09 - 146.09	-35.3		F	#		
pH	s.u.	05/19/2006	N001	136.09 - 146.09	11.77		F	#		
Potassium	mg/L	05/19/2006	0001	136.09 - 146.09	11		F	#	.074	
Sodium	mg/L	05/19/2006	0001	136.09 - 146.09	61		F	#	.0035	
Specific Conductance	umhos/cm	05/19/2006	N001	136.09 - 146.09	782		F	#		
Sulfate	mg/L	05/19/2006	0001	136.09 - 146.09	74		F	#	1	
Temperature	C	05/19/2006	N001	136.09 - 146.09	9.76		F	#		
Total Dissolved Solids	mg/L	05/19/2006	0001	136.09 - 146.09	250		F	#	20	
Turbidity	NTU	05/19/2006	N001	136.09 - 146.09	2.09		F	#		
Uranium	mg/L	05/19/2006	0001	136.09 - 146.09	0.0012		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0716 WELL

Parameter	Units	Sample Date	ID	Depth Range (Ft BLS)	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	183.44 - 223.44	161		FQ	#		
Calcium	mg/L	05/18/2006	0001	183.44 - 223.44	39		FQ	#	.0056	
Calcium	mg/L	05/18/2006	0002	183.44 - 223.44	40		FQ	#	.0056	
Chloride	mg/L	05/18/2006	0001	183.44 - 223.44	5		FQ	#	.4	
Chloride	mg/L	05/18/2006	0002	183.44 - 223.44	5.3		FQ	#	.4	
Iron	mg/L	05/18/2006	0001	183.44 - 223.44	0.014	U	FQ	#	.014	
Iron	mg/L	05/18/2006	0002	183.44 - 223.44	0.016	B	UFQ	#	.014	
Magnesium	mg/L	05/18/2006	0001	183.44 - 223.44	5		FQ	#	.0068	
Magnesium	mg/L	05/18/2006	0002	183.44 - 223.44	5		FQ	#	.0068	
Manganese	mg/L	05/18/2006	0001	183.44 - 223.44	0.052		FQ	#	.00023	
Manganese	mg/L	05/18/2006	0002	183.44 - 223.44	0.053		FQ	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	183.44 - 223.44	34.4		FQ	#		
pH	s.u.	05/18/2006	N001	183.44 - 223.44	7.54		FQ	#		
Potassium	mg/L	05/18/2006	0001	183.44 - 223.44	13		FQ	#	.074	
Potassium	mg/L	05/18/2006	0002	183.44 - 223.44	13		FQ	#	.074	
Sodium	mg/L	05/18/2006	0001	183.44 - 223.44	27		FQ	#	.0035	
Sodium	mg/L	05/18/2006	0002	183.44 - 223.44	27		FQ	#	.0035	
Specific Conductance	umhos/cm	05/18/2006	N001	183.44 - 223.44	369		FQ	#		
Sulfate	mg/L	05/18/2006	0001	183.44 - 223.44	32		FQ	#	1	
Sulfate	mg/L	05/18/2006	0002	183.44 - 223.44	32		FQ	#	1	
Temperature	C	05/18/2006	N001	183.44 - 223.44	11.6		FQ	#		
Total Dissolved Solids	mg/L	05/18/2006	0001	183.44 - 223.44	270		FQ	#	20	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0716 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Total Dissolved Solids	mg/L	05/18/2006	0002	183.44 - 223.44	260		FQ	#	20	
Turbidity	NTU	05/18/2006	N001	183.44 - 223.44	4.34		FQ	#		
Uranium	mg/L	05/18/2006	0001	183.44 - 223.44	0.0017		FQ	#	.0000034	
Uranium	mg/L	05/18/2006	0002	183.44 - 223.44	0.0016		FQ	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0720 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
							Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	126	- 136	246		F	#		
Calcium	mg/L	05/18/2006	0001	126	- 136	66		F	#	.0056	
Chloride	mg/L	05/18/2006	0001	126	- 136	14		F	#	1	
Iron	mg/L	05/18/2006	0001	126	- 136	0.014	U	F	#	.014	
Magnesium	mg/L	05/18/2006	0001	126	- 136	6.3		F	#	.0068	
Manganese	mg/L	05/18/2006	0001	126	- 136	0.018		F	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	126	- 136	59.2		F	#		
pH	s.u.	05/18/2006	N001	126	- 136	7.52		F	#		
Potassium	mg/L	05/18/2006	0001	126	- 136	11		F	#	.074	
Sodium	mg/L	05/18/2006	0001	126	- 136	51		F	#	.0035	
Specific Conductance	umhos/cm	05/18/2006	N001	126	- 136	568		F	#		
Sulfate	mg/L	05/18/2006	0001	126	- 136	66		F	#	2.5	
Temperature	C	05/18/2006	N001	126	- 136	10.37		F	#		
Total Dissolved Solids	mg/L	05/18/2006	0001	126	- 136	390		F	#	20	
Turbidity	NTU	05/18/2006	N001	126	- 136	1.49		F	#		
Uranium	mg/L	05/18/2006	0001	126	- 136	0.005		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0721 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers			Detection Limit	Uncertainty
						Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/18/2006	0001	147.5 - 157.5	105		F	#		
Calcium	mg/L	05/18/2006	0001	147.5 - 157.5	27		F	#	.0056	
Chloride	mg/L	05/18/2006	0001	147.5 - 157.5	4.4		F	#	.2	
Iron	mg/L	05/18/2006	0001	147.5 - 157.5	0.018	B	F	#	.014	
Magnesium	mg/L	05/18/2006	0001	147.5 - 157.5	3.3		F	#	.0068	
Manganese	mg/L	05/18/2006	0001	147.5 - 157.5	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	147.5 - 157.5	56		F	#		
pH	s.u.	05/18/2006	N001	147.5 - 157.5	7.39		F	#		
Potassium	mg/L	05/18/2006	0001	147.5 - 157.5	1.8		F	#	.074	
Sodium	mg/L	05/18/2006	0001	147.5 - 157.5	12	E	F	#	.0035	
Specific Conductance	umhos/cm	05/18/2006	N001	147.5 - 157.5	212		F	#		
Sulfate	mg/L	05/18/2006	0001	147.5 - 157.5	7.4		F	#	.5	
Temperature	C	05/18/2006	N001	147.5 - 157.5	10.77		F	#		
Total Dissolved Solids	mg/L	05/18/2006	0001	147.5 - 157.5	180		F	#	20	
Turbidity	NTU	05/18/2006	N001	147.5 - 157.5	0.72		F	#		
Uranium	mg/L	05/18/2006	0001	147.5 - 157.5	0.00073		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0722 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
							Lab	Data	QA		
Calcium	mg/L	05/18/2006	0001	157	- 167	37		F	#	.0056	
Chloride	mg/L	05/18/2006	0001	157	- 167	5.5		F	#	.4	
Iron	mg/L	05/18/2006	0001	157	- 167	0.017	B	F	#	.014	
Magnesium	mg/L	05/18/2006	0001	157	- 167	4.1		F	#	.0068	
Manganese	mg/L	05/18/2006	0001	157	- 167	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/18/2006	N001	157	- 167	48.9		F	#		
pH	s.u.	05/18/2006	N001	157	- 167	7.53		F	#		
Potassium	mg/L	05/18/2006	0001	157	- 167	4.1		F	#	.074	
Sodium	mg/L	05/18/2006	0001	157	- 167	14		F	#	.0035	
Specific Conductance	umhos/cm	05/18/2006	N001	157	- 167	263		F	#		
Sulfate	mg/L	05/18/2006	0001	157	- 167	10		F	#	1	
Temperature	C	05/18/2006	N001	157	- 167	10.8		F	#		
Total Dissolved Solids	mg/L	05/18/2006	0001	157	- 167	200		F	#	20	
Turbidity	NTU	05/18/2006	N001	157	- 167	1.62		F	#		
Uranium	mg/L	05/18/2006	0001	157	- 167	0.0016		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0723 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
							Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/19/2006	0001	147	- 157	118		F	#		
Calcium	mg/L	05/19/2006	0001	147	- 157	45		F	#	.0056	
Chloride	mg/L	05/19/2006	0001	147	- 157	15		F	#	.4	
Iron	mg/L	05/19/2006	0001	147	- 157	0.014	U	F	#	.014	
Magnesium	mg/L	05/19/2006	0001	147	- 157	4.7		F	#	.0068	
Manganese	mg/L	05/19/2006	0001	147	- 157	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/19/2006	N001	147	- 157	123.9		F	#		
pH	s.u.	05/19/2006	N001	147	- 157	7.6		F	#		
Potassium	mg/L	05/19/2006	0001	147	- 157	3.3		F	#	.074	
Sodium	mg/L	05/19/2006	0001	147	- 157	16		F	#	.0035	
Specific Conductance	umhos/cm	05/19/2006	N001	147	- 157	343		F	#		
Sulfate	mg/L	05/19/2006	0001	147	- 157	24		F	#	1	
Temperature	C	05/19/2006	N001	147	- 157	9.05		F	#		
Total Dissolved Solids	mg/L	05/19/2006	0001	147	- 157	250		F	#	20	
Turbidity	NTU	05/19/2006	N001	147	- 157	1.51		F	#		
Uranium	mg/L	05/19/2006	0001	147	- 157	0.0027		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0724 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
							Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/19/2006	0001	127	- 137	246		F	#		
Calcium	mg/L	05/19/2006	0001	127	- 137	27		F	#	.0056	
Chloride	mg/L	05/19/2006	0001	127	- 137	5.2		F	#	.4	
Iron	mg/L	05/19/2006	0001	127	- 137	0.014	U	F	#	.014	
Magnesium	mg/L	05/19/2006	0001	127	- 137	2.8		F	#	.0068	
Manganese	mg/L	05/19/2006	0001	127	- 137	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/19/2006	N001	127	- 137	107.7		F	#		
pH	s.u.	05/19/2006	N001	127	- 137	7.45		F	#		
Potassium	mg/L	05/19/2006	0001	127	- 137	2.8		F	#	.074	
Sodium	mg/L	05/19/2006	0001	127	- 137	14		F	#	.0035	
Specific Conductance	umhos/cm	05/19/2006	N001	127	- 137	237		F	#		
Sulfate	mg/L	05/19/2006	0001	127	- 137	11		F	#	1	
Temperature	C	05/19/2006	N001	127	- 137	9.98		F	#		
Total Dissolved Solids	mg/L	05/19/2006	0001	127	- 137	190		F	#	20	
Turbidity	NTU	05/19/2006	N001	127	- 137	1.51		F	#		
Uranium	mg/L	05/19/2006	0001	127	- 137	0.00082		F	#	.0000034	

Ground Water Quality Data by Location (USEE100) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/14/2006
 Location: 0725 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)		Result	Qualifiers			Detection Limit	Uncertainty
							Lab	Data	QA		
Alkalinity, Total (As CaCO3)	mg/L	05/19/2006	0001	130	- 140	178		F	#		
Calcium	mg/L	05/19/2006	0001	130	- 140	41		F	#	.0056	
Chloride	mg/L	05/19/2006	0001	130	- 140	9.4		F	#	.4	
Iron	mg/L	05/19/2006	0001	130	- 140	0.014	U	F	#	.014	
Magnesium	mg/L	05/19/2006	0001	130	- 140	3.2		F	#	.0068	
Manganese	mg/L	05/19/2006	0001	130	- 140	0.00023	U	FJ	#	.00023	
Oxidation Reduction Potential	mV	05/19/2006	N001	130	- 140	80.3		F	#		
pH	s.u.	05/19/2006	N001	130	- 140	7.78		F	#		
Potassium	mg/L	05/19/2006	0001	130	- 140	6.4		F	#	.074	
Sodium	mg/L	05/19/2006	0001	130	- 140	30		F	#	.0035	
Specific Conductance	umhos/cm	05/19/2006	N001	130	- 140	384		F	#		
Sulfate	mg/L	05/19/2006	0001	130	- 140	29		F	#	1	
Temperature	C	05/19/2006	N001	130	- 140	10.42		F	#		
Total Dissolved Solids	mg/L	05/19/2006	0001	130	- 140	260		F	#	20	
Turbidity	NTU	05/19/2006	N001	130	- 140	1.25		F	#		
Uranium	mg/L	05/19/2006	0001	130	- 140	0.0021		F	#	.0000034	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- * Replicate analysis not within control limits.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.

I Increased detection limit due to required dilution.
J Estimated
N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P > 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
U Analytical result below detection limit.
W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X,Y,Z Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

F	Low flow sampling method used.	G	Possible grout contamination, pH > 9.	J	Estimated value.
L	Less than 3 bore volumes purged prior to sampling.	Q	Qualitative result due to sampling technique.	R	Unusable result.
U	Parameter analyzed for but was not detected.	X	Location is undefined.		

QA QUALIFIER:

Validated according to quality assurance guidelines.

Equipment Blank Data

BLANKS REPORT
 LAB: PARAGON (Fort Collins, CO)
 RIN: 06040365
 Report Date: 7/14/2006

Parameter	Site Code	Location ID	Sample Date	Sample ID	Units	Result	Qualifiers Lab	Data	Detection Limit	Uncertainty	Sample Type
Calcium	GUN01	0999	05/18/2006	0001	mg/L	.046	B	U	.0056		E
Iron	GUN01	0999	05/18/2006	0001	mg/L	.014	U		.014		E
Magnesium	GUN01	0999	05/18/2006	0001	mg/L	.0068	U		.0068		E
Manganese	GUN01	0999	05/16/2006	0001	mg/L	.00023	U	J	.00023		E
Manganese	GUN01	0999	05/17/2006	0001	mg/L	.00023	U	J	.00023		E
Manganese	GUN01	0999	05/18/2006	0001	mg/L	.00023	U	J	.00023		E
Potassium	GUN01	0999	05/18/2006	0001	mg/L	.32	B	U	.074		E
Sodium	GUN01	0999	05/18/2006	0001	mg/L	.0035	U		.0035		E
Uranium	GUN01	0999	05/16/2006	0001	mg/L	.000045	B	U	.0000034		E
Uranium	GUN01	0999	05/17/2006	0001	mg/L	.000066	B	U	.0000034		E
Uranium	GUN01	0999	05/18/2006	0001	mg/L	.000033	B	U	.0000034		E
Uranium	GUN01	0999	05/18/2006	0001	mg/L	.000033	B	U	.0000034		E

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- * Replicate analysis not within control limits.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X,Y,Z Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

- | | | | | | |
|---|--|---|---|---|------------------|
| F | Low flow sampling method used. | G | Possible grout contamination, pH > 9. | J | Estimated value. |
| L | Less than 3 bore volumes purged prior to sampling. | Q | Qualitative result due to sampling technique. | R | Unusable result. |
| U | Parameter analyzed for but was not detected. | X | Location is undefined. | | |

SAMPLE TYPES:

- | | |
|---|------------------|
| E | Equipment Blank. |
|---|------------------|

Static Water Level Data

STATIC WATER LEVELS (USEE700) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/13/2006

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement	Date Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0002	U	7646.75	16-MAY-06	16:03:00	6.73	7640.02	
0005	O	7644.66	15-MAY-06	15:39:00	7.02	7637.64	
0006	O	7647.19	15-MAY-06	16:49:00	14.84	7632.35	
0012	O	7645.46	15-MAY-06	18:47:00	16.24	7629.22	
0013	D	7643.75	18-MAY-06		22.77	7620.98	
0062	O	7630.61	18-MAY-06	09:17:00	9.85	7620.76	
0063	O	7630.34	18-MAY-06	08:38:00	10.89	7619.45	
0064	O	7620.76	17-MAY-06	18:12:00	7.05	7613.71	
0065	O	7610.27	16-MAY-06	17:02:00	2.11	7608.16	
0066	O	7606.22	16-MAY-06	14:03:00	1.46	7604.76	
0067	O	7628.96	17-MAY-06	12:35:00	0	7628.96	
0081			17-MAY-06	11:08:00	2.68	-2.68	
0082			17-MAY-06	12:03:00	1.18	-1.18	
0102	U	7647.3	16-MAY-06	15:33:00	7.8	7639.5	
0105	O	7646.11	15-MAY-06	18:10:00	9.48	7636.63	
0106	O	7647.3	15-MAY-06	16:19:00	15.35	7631.95	
0112	O	7644.84	15-MAY-06	19:12:00	18.75	7626.09	
0113	D	7643.83	18-MAY-06	11:17:00	18.87	7624.96	
0125	D	7633.52	17-MAY-06	14:43:00	8.2	7625.32	
0126	D	7634.14	17-MAY-06	15:15:00	145.56	7488.58	
0127	D	7634.64	17-MAY-06	15:47:00	17.97	7616.67	
0135	D	7627.03	17-MAY-06	16:37:00	6.38	7620.65	
0136	D	7626.24	17-MAY-06	17:06:00	14.63	7611.61	
0160	D	7604.39	16-MAY-06	08:45:00	3.99	7600.4	
0161	D	7605.63	16-MAY-06	08:15:00	5.38	7600.25	
0181	D	7619.07	16-MAY-06	12:49:00	6.33	7612.74	
0183	D	7617.82	16-MAY-06	13:20:00	5.85	7611.97	
0186	D	7627.21	17-MAY-06	08:18:00	7.81	7619.4	

STATIC WATER LEVELS (USEE700) FOR SITE GUN01, Gunnison Processing Site
 REPORT DATE: 7/13/2006

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Time	Date	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0187	D	7625.91	17-MAY-06	09:06:00	7.19	7618.72	
0188	D	7613.65	16-MAY-06	09:29:00	4.97	7608.68	
0189	D	7613.56	16-MAY-06	09:58:00	5.32	7608.24	
0468	D		16-MAY-06	17:52:00	3.33		

STATIC WATER LEVELS (USEE700) FOR SITE GUN08, Gunnison Disposal Site
 REPORT DATE: 7/13/2006

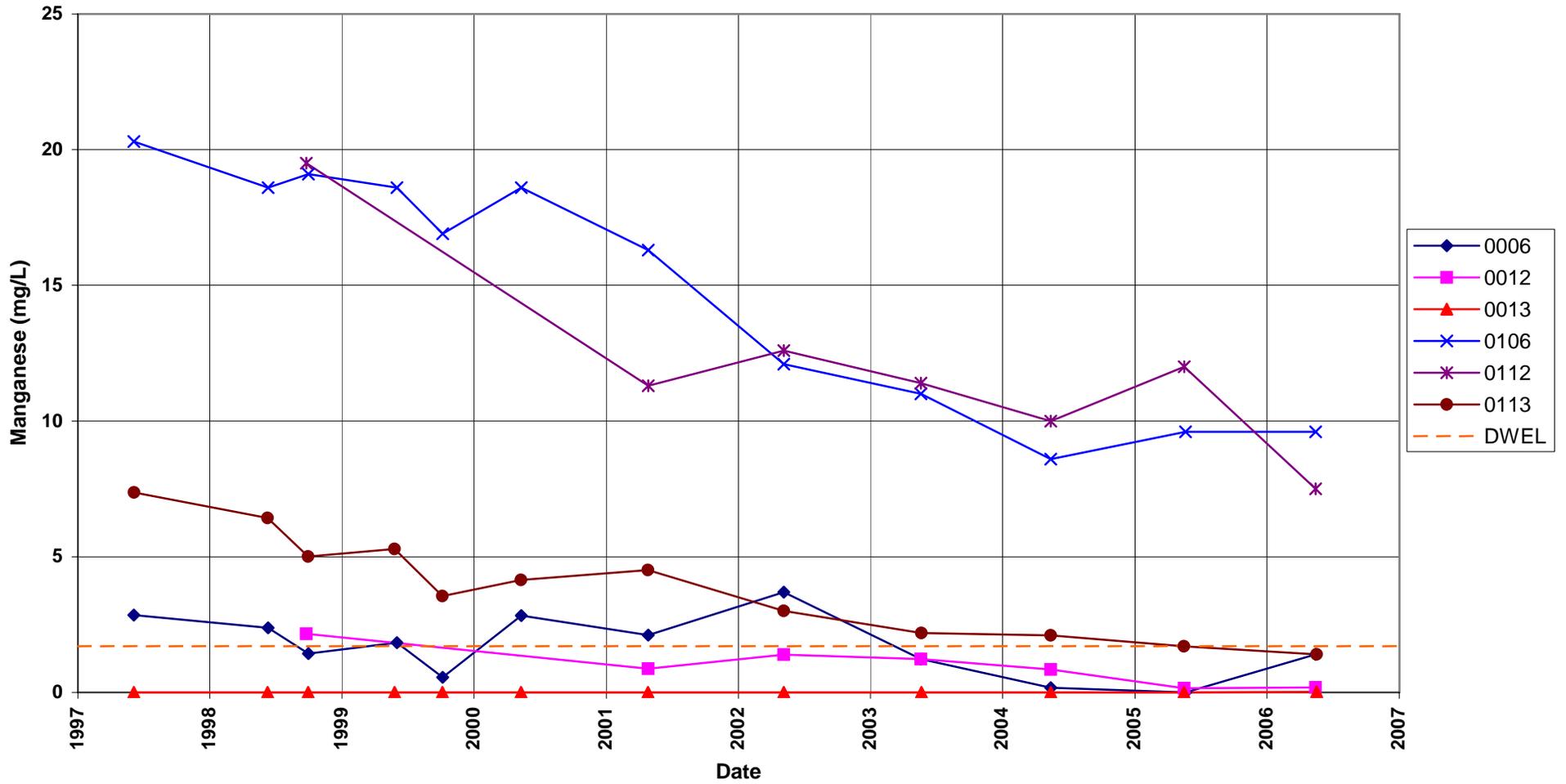
Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Time	Date	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0609	O	8012.64	19-MAY-06	09:50:00	104.76	7907.88	
0720	D	8026.54	18-MAY-06	17:16:00	118.01	7908.53	
0721	D	8047.15	18-MAY-06	16:44:00	140.4	7906.75	
0722	D	8051.96	18-MAY-06	16:04:00	148.98	7902.98	
0723	D	8040.49	19-MAY-06	07:47:00	138.59	7901.9	
0724	D	8028.21	19-MAY-06	08:33:00	130.44	7897.77	
0725	D	8015.47	19-MAY-06	09:11:00	119.31	7896.16	

FLOW CODES: B BACKGROUND U UPGRADIENT C CROSS GRADIENT D DOWN GRADIENT O ON SITE

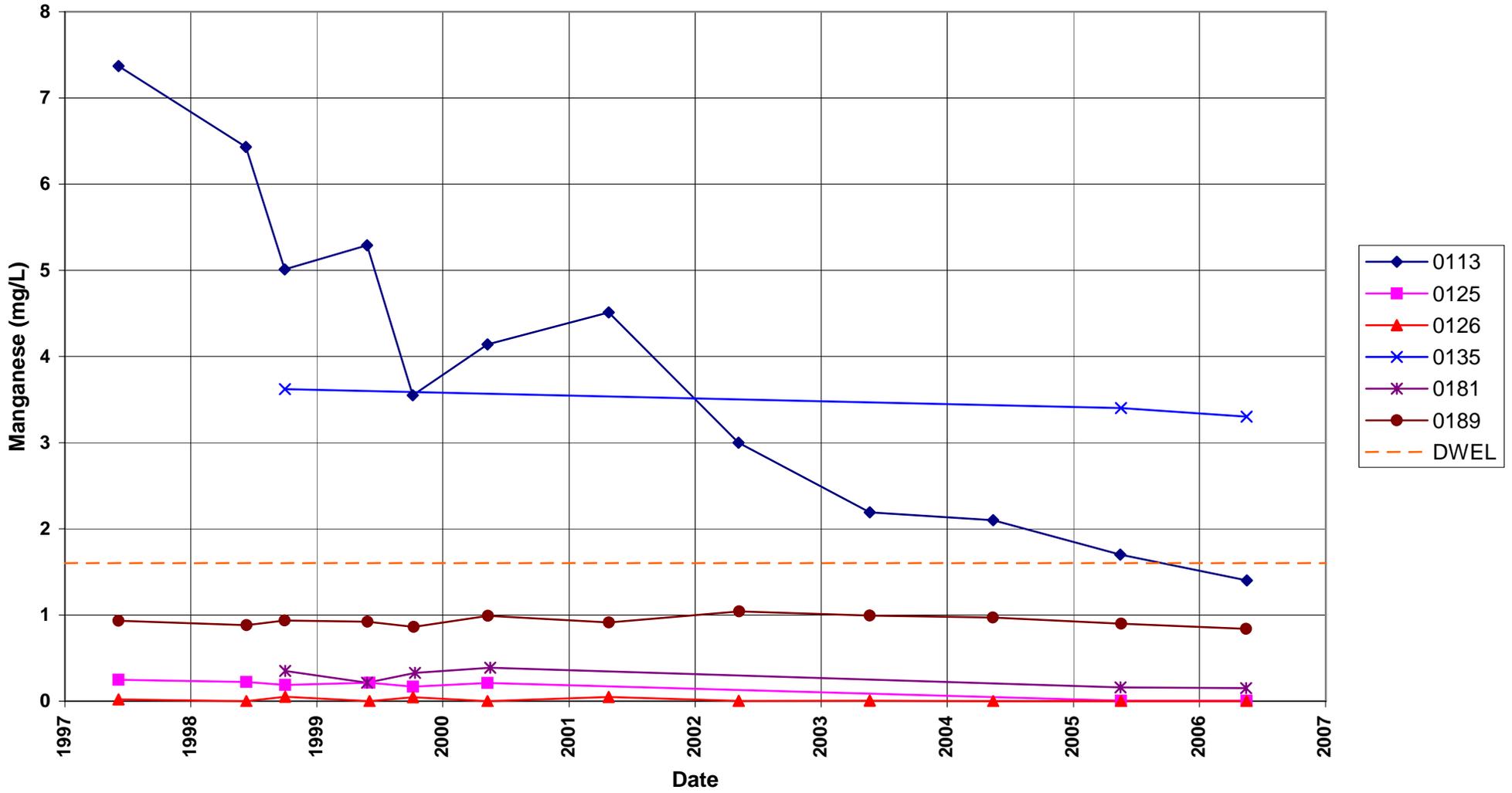
WATER LEVEL FLAGS: D Dry

Time Versus Concentration Graphs

Gunnison Processing Site Selected Monitor Wells
Manganese Concentration
Drinking Water Equivalent Level (DWEL) = 1.6 mg/L



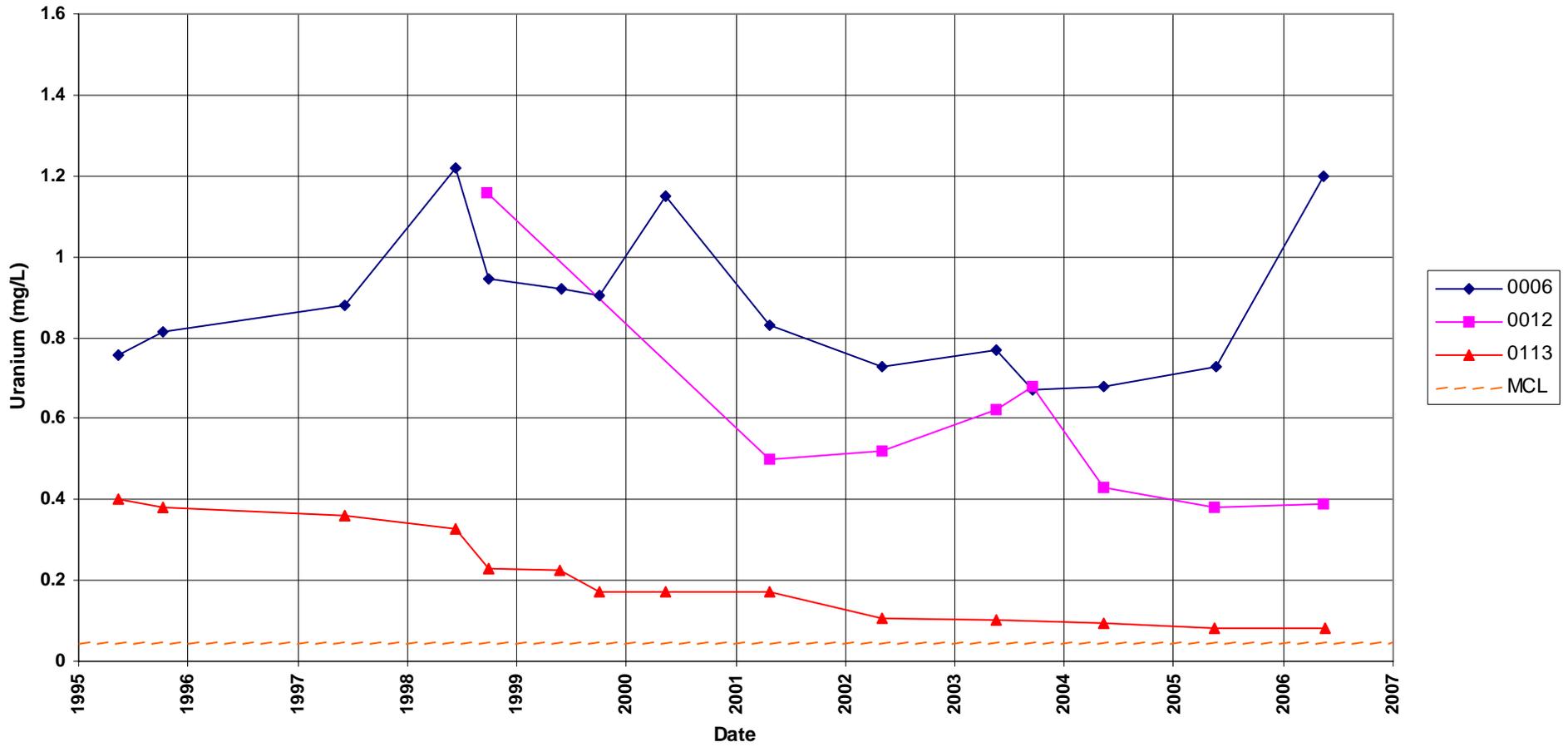
Gunnison Processing Site Selected Monitor Wells
Manganese Concentration
Drinking Water Equivalent Level (DWEL) = 1.6 mg/L



Gunnison Processing Site Selected Monitor Wells

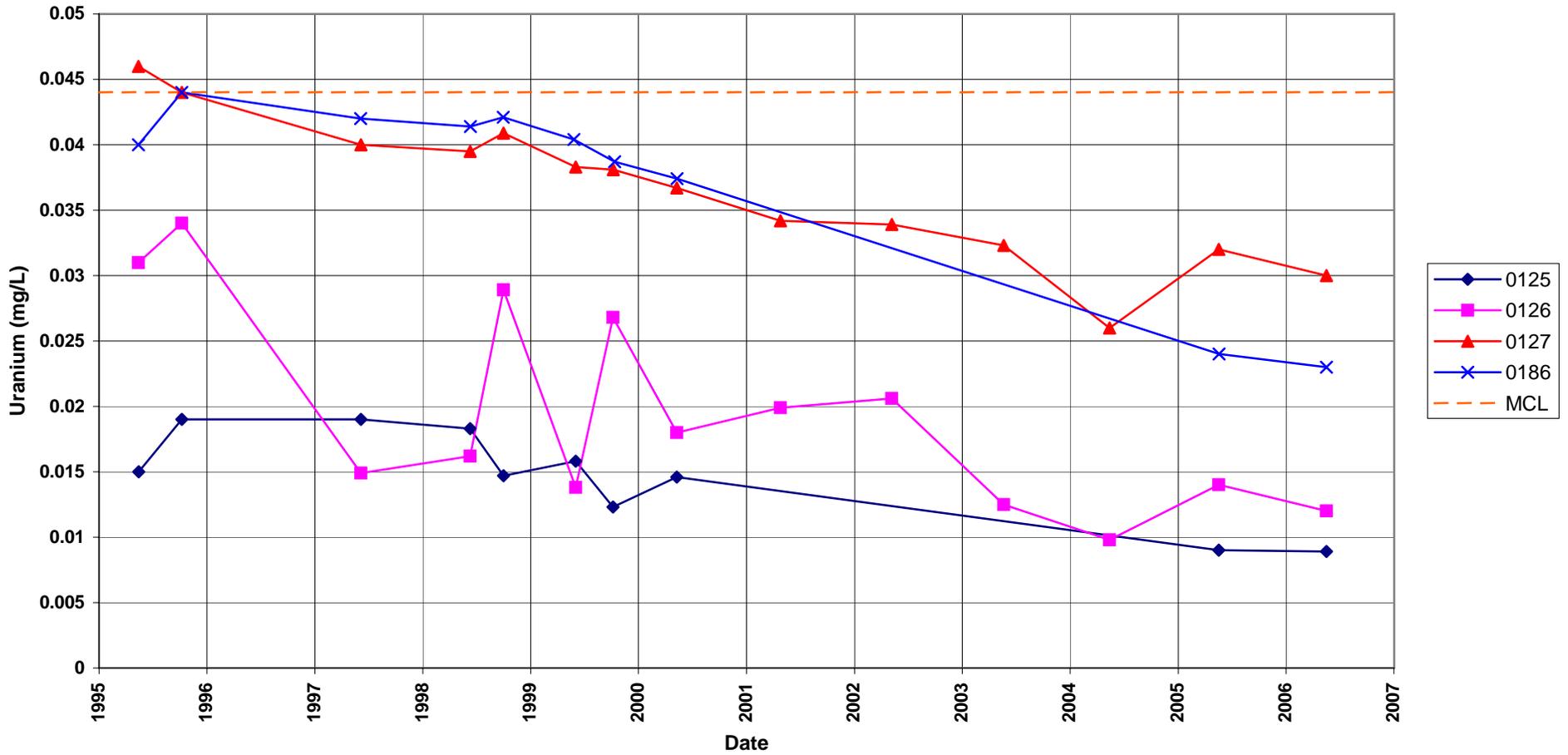
Uranium Concentration

Maximum Contaminant Level (MCL) = 0.044 mg/L



Gunnison Processing Site Selected Monitor Wells Uranium Concentration

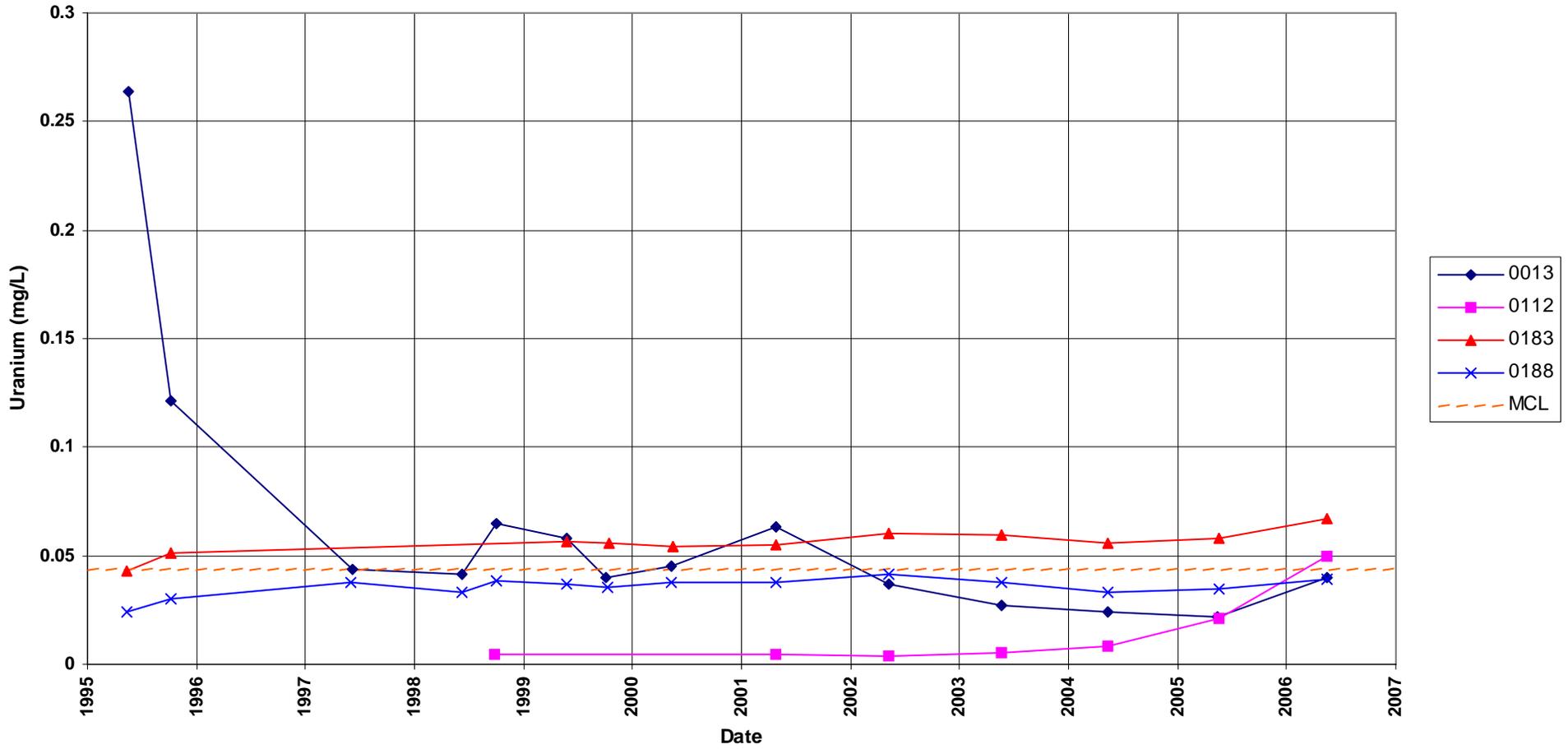
Maximum Contaminant Level (MCL) = 0.044 mg/L



Gunnison Processing Site selected Monitor Wells

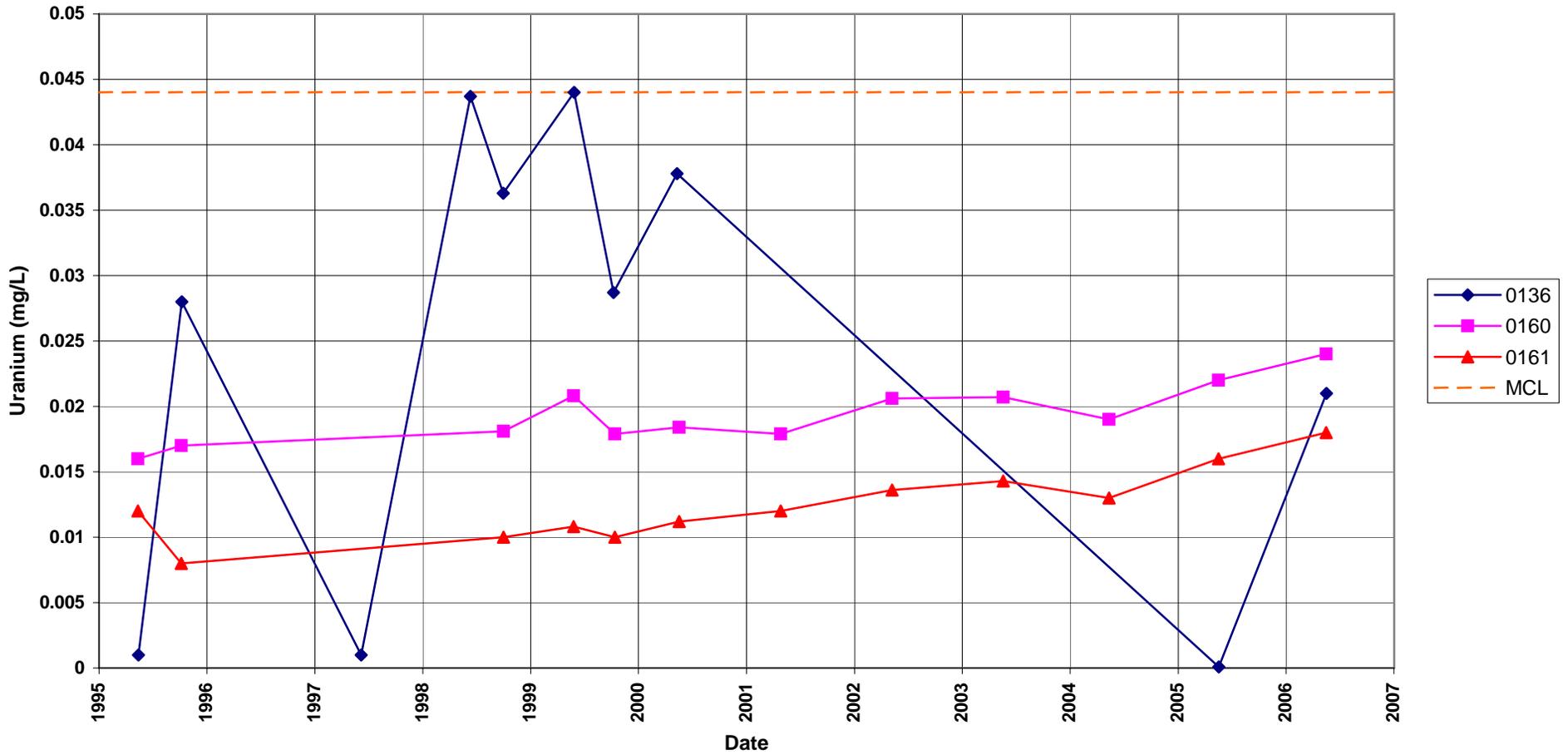
Uranium Concentration

Maximum Contaminant Level = 0.044 mg/L



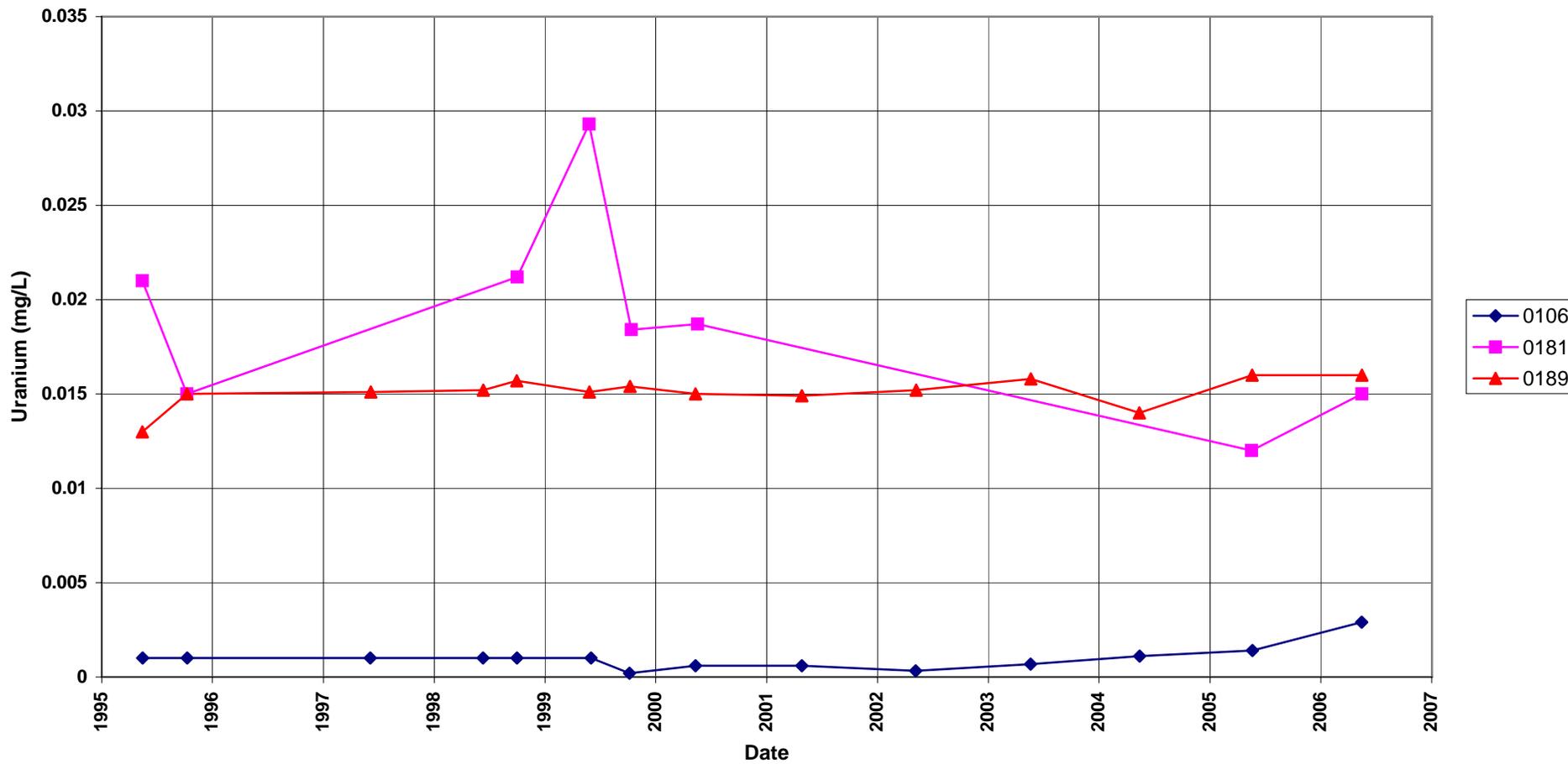
Gunnison Processing Site Selected Monitor Wells Uranium Concentration

Maximum Contaminant Level = 0.044 mg/L



Gunnison Processing Site Selected Monitor Wells Uranium Concentration

Maximum Contaminant Level (MCL) = 0.044 mg/L



Attachment 3
Sampling and Analysis Work Order

April 18, 2006

Richard P. Bush
Site Manager
U.S. Department of Energy
Office of Legacy Management
2597 B ³/₄ Road
Grand Junction, CO 81503

SUBJECT: Contract No. DE-AC01-02GJ79491, Stoller
May 2006 Environmental Sampling at Gunnison, Colorado

Reference: FY 2006 LM Task Order No. ST06-102-16

Dear Mr. Bush:

The purpose of this letter is to inform you of the upcoming sampling at Gunnison, Colorado. Enclosed are the maps and tables specifying sample locations and analytes for monitoring at the Gunnison, Colorado, Processing and Disposal Sites. Water quality data will be collected at this site as part of the routine environmental sampling currently scheduled to begin the week of May 15, 2006.

The following lists show the monitor wells (with zone of completion), surface locations, and private wells scheduled to be sampled during this event.

Processing Site (GUN01) Monitor Wells (filtered)*

002 Al	062 Al	066 Al	106 Al	126 Al	160 Al	186 Al
005 Al	063 Al	067 Al	112 Al	127 Al	161 Al	187 Al
006 Al	064 Al	102 Al	113 Al	135 Al	181 Al	188 Al
012 Al	065 Al	105 Al	125 Al	136 Al	183 Al	189 Al
013 Al						

Processing Site (GUN01) Domestic Wells (Unfiltered)

080 Nr	082 Nr	469 Al	667 Al	680	683 Nr	685 Nr
081 Nr	468 Al	665 Al				

Disposal Site (GUN08) Monitor Wells (filtered)*

609 Gc	720 Tg	721 Tg	722 Tg	723 Tg	724 Tg	725 Tg
716 Gc						

*NOTE: Al = Alluvium; Gc = Clayey gravel; Nr = no recovery of data for classifying;
Tg = Tertiary gravels

Surface Locations (GUN01) (filtered)

248 777 780 792 795

QA/QC samples will be collected as directed in the *Sampling and Analysis Plan for GJO Projects*. Access agreements are being reviewed and are expected to be complete by the beginning of fieldwork.

If you have any questions, please call me at extension 6588 or Sam Campbell at extension 6654.

Sincerely,

Signature on original

Clay Carpenter
Project Manager

CC/mat/lac
Enclosures (3)

cc: C. I. Bahrke, Stoller
 S. E. Campbell, Stoller (e)
 S. E. Donovan, Stoller (e)
 L. C. Goodknight, Stoller (e)
 K. E. Miller, Stoller
 D. G. Traub, Stoller (e)

cc w/o enclosures:
 Correspondence Control File (Thru B. Bonnett)

Site	Gunnison		
Analyte	Ground Water		Surface Water
Approx. No. Samples/yr.	47		5
Field Measurements			
Alkalinity	X		X
Dissolved Oxygen			
Redox Potential	X		X
pH	X		X
Specific Conductance	X		X
Turbidity	X		X
Temperature	X		X
Laboratory Measurements			
	<i>GUN01</i>	<i>GUN08</i>	<i>GUN01</i>
Aluminum			
Ammonia as N (NH3-N)			
Antimony			
Arsenic			
Boron			
Beryllium			
Bromide			
Cadmium			
Calcium		X	
Chloride		X	
Chromium			
Cobalt			
Copper			
Fluoride			
Gamma Spec			
Gross Alpha			
Gross Beta			
Iron		X	
Lead			
Lead-210			
Magnesium		X	
Manganese	X	X	X
Molybdenum			
Nickel			
Nickel-63			
Nitrate + Nitrite as N (NO3+NO2)-N			
PCBs			
Phosphate			
Polonium-210			
Potassium		X	
Radium-226			
Radium-228			
Selenium			
Silica			

Analyte	Ground Water		Surface Water
Laboratory Measurements	GUN01	GUN08	GUN01
Sodium		X	
Strontium			
Sulfate		X	
Sulfide			
Thallium			
Thorium-230			
Tin			
Total Dissolved Solids		X	
Total Organic Carbon			
Tritium			
Uranium	X	X	X
Uranium-234, -238			
Vanadium			
Zinc			
Total Analytes	2	10	2

Note: All analyte samples are considered filtered unless stated otherwise. All private well samples are to be unfiltered. The total number of analytes does not include field parameters.

GUN01 = Processing site; GUN08 = Disposal Site

Attachment 4
Trip Report

Memorandum

Control Number N/A

DATE: June 7, 2006
 TO: Sam Campbell
 FROM: Farlie Pearl *fp*
 SUBJECT: Trip Report

Site: Gunnison, Colorado, Processing (GUN01) and Disposal Site (GUN08)

Dates of Sampling Event: May 15 to May 19, 2006, and June 1, 2006

Team Members: Jeff Walters, Farlie Pearl, and Jeff Price

Number of Locations Sampled: Samples were collected from 51 locations as follows: 29 processing site monitor wells, 9 domestic wells, 5 surface water locations and 8 disposal site monitor wells.

Locations Not Sampled/Reason: All locations on the Sample Locations and Analytes table were sampled. Domestic well 0680 listed on the sample-planning letter dated May 2006, but not included in the table, was decommissioned.

Location Specific Information: Well development preceded sampling at the following locations: 0013, 0062, 0063, 0064, 0065, 0066, 0113, 0125, 0126, 0127, 0136, 0160, 0161, 0181, 0183, 0187, 0188, and 0189.

New tubing was installed in well 0102.

At location 0469 the sample was collected unfiltered from the kitchen sink. At locations 0080, 0665, 0667, 0683, and 0685, samples were collected unfiltered from outdoor faucets.

Well category changes were noted in 14 wells as follows:

Well ID	Previous Category	Current Category	Well ID	Previous Category	Current Category
0005	Unknown	I	0716	Unknown	I
0006	II - III	I	0720	Unknown	I
0013	II	III	0721	Unknown	I
0081	IV	I	0722	Unknown	I
0082	IV	I	0723	Unknown	I
0187	Unknown	I	0724	Unknown	I
0609	Unknown	I	0725	Unknown	I

Well 0183 appears to have been hit with golf course equipment. The well casing is cracked below ground surface and needs to be repaired and realigned, or flush mounted.

The concrete pads need to be replaced at locations 0125 and 0127. Additionally the pads at 0135 and 0136 should be evaluated and replaced as needed.

Field Variance: Turbidity criteria were not met before samples were collected at monitor well 0081 and domestic well 0468. The turbidity stabilized at 17 NTUs at well 0081 and 15 NTUs at well 0486.

Due to a limited amount of water in well 0013, field parameters were not collected. Only enough water was available for the sample.

Alkalinity was not recorded in the field book at disposal site monitor well 0722.

The sample team failed to include the reel tubing used in collecting surface water samples in one of the equipment blank QC samples.

The water level was not measured or monitored at disposal site well 0716 because the level was deeper than 150 feet, which was all the available equipment could measure.

Quality Control Sample Cross Reference:

Sample ID	False Loc.	True Loc.	Sample Type
NDU 594	2330	N/A	Equipment Blank; following 0112
NDU 595	2331	0161	Field Duplicate
NFA 434	2332	N/A	Equipment Blank; following 0792
NFA 435	2333	0186	Field Duplicate
NFA 448	2334	N/A	Equipment Blank; following 0064
NFA 481	2335	0716	Field Duplicate

Requisition Numbers Assigned: RIN: 06040365

Water Level Measurements: The water level was measured at all monitor well locations that were sampled except 0716. Water level measurements were not obtained at the following disposal site (GUN08) monitor well locations: 0630, 0634, 0663, 0709, 0710, 0712, 0714, and 0715. These wells were not scheduled for water samples. Water level measurements will be obtained from these locations and 0716 during a return trip to the site on June 1, 2006.

Well Inspection Summary: Concrete pads at wells 0125 and 0127 are broken up and need to be replaced. The PVC riser is shattered at the top well 0125. A more secure well cap is needed at well 0067 to prevent water intrusion into the PVC riser when the field is flooded.

Equipment: There were no equipment malfunctions. When sampling at this site, team members

need to have both a 150 ft and 300 ft water level meter in order to complete the work.

Regulatory: Management of the Gunnison Crested Butte Regional Airport has changed in recent months. A business card for the Administrative Director, the point of contact to access the sample locations on the airport property, was obtained by the sampling team.

Institutional Controls

Fences, Gates, Locks: Fencing appeared to be in place and secure at the disposal site.

Signs: A couple of signs along the disposal site access road had been used for target practice. The signs are still serviceable.

Trespassing/Site Disturbances: There was no evidence of trespass or disturbance at the disposal site.

Site Issues

Disposal Cell/Drainage Structure Integrity: There were no disposal cell or drainage structure issues identified during this sampling event.

Vegetation/Noxious Weed Concerns: There were no vegetation or weed concerns identified during this sampling event.

Maintenance Requirements: It is recommended that the 2 x 4 wood posts used to latch the barbed wire gates at the disposal site be replaced with metal t-posts or non-splintering wood posts, such as juniper.

Corrective Action Taken: Well development was completed at 18 locations, as listed at the beginning of this report under "Location Specific Information."

(FAP/lcg)

cc: R. P. Bush, DOE, LM-50 (e)
C. I. Bahrke, Stoller (e)
S. E. Donivan, Stoller (e)
K. E. Miller, Stoller